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STATE DOCUMENTS



PUBLIC HEALTH SERVICES TO

MONTANA FAMILIES

MONTANA STATE DEPARTMENT OF HEALTH
HELENA, MONTANA



34TH BIENNIAL REPORT July 1, 1966 - June 30, 1968

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PUBLIC HEALTH SERVICES TO MONTANA FAMILIES

MONTANA STATE DEPARTMENT OF HEALTH
HELENA, MONTANA

34TH BIENNIAL REPORT
JULY 1, 1966 - JUNE 30, 1968



Miss Edith Kuhns

This 34th Biennial Report is dedicated to Miss Edith Kuhns who devoted her 40-year professional career to public health in Montana. As the director of the Microbiology Laboratory until her retirement in September 1967, she made a vital contribution to the health of Montana citizens.

Miss Kuhns, a native of Kalispell, graduated from Montana State University in Bozeman and had graduate work at Johns Hopkins University in Baltimore. She also attended the Army Medical School in Washington, D. C., where she received a certificate with a major in tropical medicine.

The Board and Staff of the Montana State Department of Health pay tribute to Miss Kuhns in grateful appreciation of her many years of devoted service.

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PART I. WHY PUBLIC HEALTH?

If you believe that it is every person's right to have good health, you will recognize the need for public health.

Health is not achieved automatically. In this report we show how public health serves the family. Public Health does not substitute for the responsibilities of individuals or the family. Even the most competent family requires outside help.

Sometimes the family needs accurate health information. Public Health will point the direction where this can be obtained. The family cannot be expected to know what is a qualified hospital, a sanitary restaurant, a safe water supply—much less to supervise them. Public Health does this for the family. If Public Health were not present today, it would be invented. The programs described in this report did not come into being arbitrarily. We have information about Montana's families. We know quite a bit about what the health problems are, and we try to fit programs to reduce these problems.

To assist us, we have many advisory committees. Examples are the Maternal and Child Welfare Committee of the Montana Medical Association, the Dental Advisory Committee of the Montana Dental Association, Smoking and Health Inter-agency Council, Advisory Committee to the Hearing Conservation Program; Tuberculosis Committee, Immunization Committee, Radiological Health Committee, Laboratory Committee, Emergency Health Planning, Air Pollution Council, Hospital and Medical Facilities Council, V.D. Advisory Committee and Mental Retardation Planning Committee. Membership on these committees is comprised of professional experts and consumers of health services. The latter are particularly important. They can often tell us if our ideas are practical, are needed and will have public acceptance.

There is one committee that is advisory to both the Department of Health and the Department of Public Instruction. These two departments for many years have had a committee of staff members which helps to coordinate programs having health and educational components. The Advisory Council makes recommendations to this inter-agency committee.

A new dimension has been added with the organization of the Advisory Council for Comprehensive Health Planning. This group does not eliminate the need for the other advisory committees to the Montana State Department of Health. The Comprehensive Health Planning Council will study health needs of the entire State, recommend immediate and long range health goals and make suggestions on how to achieve these goals. This Council will certainly need the help and other assistance of advisory committees to the State Department of Health and other State and community health agencies.

These committees illustrate why a State Department of Health is needed. The word is coordination. For over two years the Montana State Department of Health made it possible for people throughout the State to get together and study what should be done to bring about better services for the mentally retarded. The people individually had solutions to problems, but the event of bringing them together was necessary.

We feel that by involving as many people as possible, we can better perform our task of arranging for the programs that are wanted and needed.

As always, desires are greater than capabilities. There is so much to be done.

You, the people of Montana, are encouraged to read these reports of what we are doing. We welcome your suggestions. Even more, we welcome and need your help.



John S. Anderson, M.D., M.P.H.
Executive Officer

HIGHLIGHTS

STATE DEPARTMENT OF HEALTH SERVICES TO MONTANA FAMILIES

JULY 1, 1966 - JUNE 30, 1968

Steps have been taken to bring about the organization of two new full-time Health Departments in Silver Bow and Gallatin Counties. Comprehensive Health Planning is a new function added to the SDH responsibilities. Federal grants allocated to the SDH for the 1969 fiscal year will make it possible to budget more funds for improving local public health programs.

There were three air pollution studies completed and two new ones started.

A program has started to reduce the incidence of lung cancer, certain forms of heart disease, emphysema and other disorders caused by cigarette smoking.

A mass screening program for the detection of diabetics is underway to find unknown cases of diabetes and encourage these individuals to get medical supervision.

More than 33,000 children have been immunized against measles at mass clinics conducted in 58 clinics, in addition to those who have been protected in the offices of the practicing physicians.

A tuberculosis clinic was established in Great Falls and plans are underway for similar clinics in Billings, Butte and Missoula.

A random sample survey of instruction in venereal disease education in Montana Schools shows there are a few excellent on-going programs, some mediocre, and in some schools there is no venereal disease education included in the curriculum.

To reduce accidental death and injury from causes that can be prevented, a program will begin in the next fiscal year. Montana's rates from most causes of accidents are higher than or almost as high as the national rates.

There were 218 persons from hospital emergency rooms and ambulance services who attended training courses in emergency medical service.

Packaged Disaster Hospitals and Hospital Reserve Disaster Inventory Supplies have been placed in strategic locations in the State.

The Cleft Lip-Cleft Palate program provided care for 328 children. Children seen at Medical Clinics and for Speech and Hearing Problems at the Center for Handicapped Children totaled 745.

Preschool vision screening programs have been conducted in 45 of the State's 56 Counties.

The Armed Forces Examining Station in Butte rejected 27% of the 2,000 young men and women examined during the 1967 fiscal year for medical reasons. About 30% of them asked for help under the SDH Health Referral Service.

A complete diagnostic clinic for suspected cases of Mental Retardation has been established in Missoula.

During the 21 years of the Hospital and Medical Facilities Construction Program, 78 projects in 39 communities have been constructed using Federal matching funds.

The first community Family Planning Program was initiated in Missoula and Mineral Counties.

A Children and Youth Project to provide health services for the indigent and medically indigent is underway in Lewis and Clark County.

A course on Dental Services for the Mentally Retarded is conducted three days each month at which four of the State's practicing dentists participate.

Approximately 60,000 specimens are tested in the Microbiology Laboratory each year.

New birth, death and fetal death certificate forms have been developed to reflect the changes in medical practice and to provide needed statistical data.

A stepped-up program to improve solid waste disposal in Montana's 514 communities is underway.

New licensing standards for long-term care facilities were developed.

Between 1960 and 1966 there has been an over all increase in the State's population of 4.0%. There has been an increase in the number of households and a decrease in the number of persons per household.

There were six new sewer systems with treatment facilities and six new waste water treatment plants designed to replace old plants and facilities. Permits are now required before waste can be discharged into a stream.

A survey has been completed which has located the sources of ionizing equipment in the State.

Since 1964 there have been 18,862 children given a hearing screening test, 1,823 field threshold tests and 461 referred; 746 were provided with clinical services and 120 were referred for hearing aid service; since 1965 in the adult program, 3,422 persons were given screening tests, 890 threshold tests and 243 referred for care.

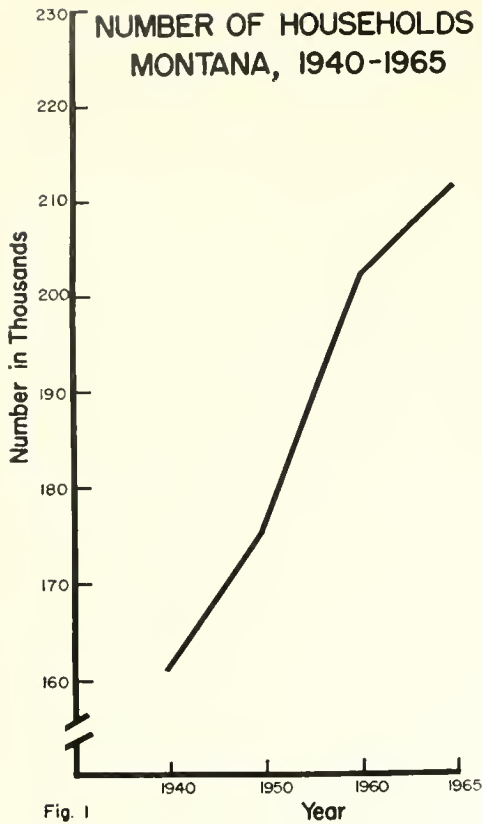
Home Health Care is available to 48% of the State's population.

Montana's families, living in 194 Montana municipalities are provided with safe drinking water supplies.

The 287 health films have been loaned 2,562 times and seen by 53,702 persons.

The DMF (decayed, missing and filled) rate in the children's teeth in five of the Ravalli County Schools has been reduced from 12% to 56% as a result of the topical fluoride application program underway since 1960.

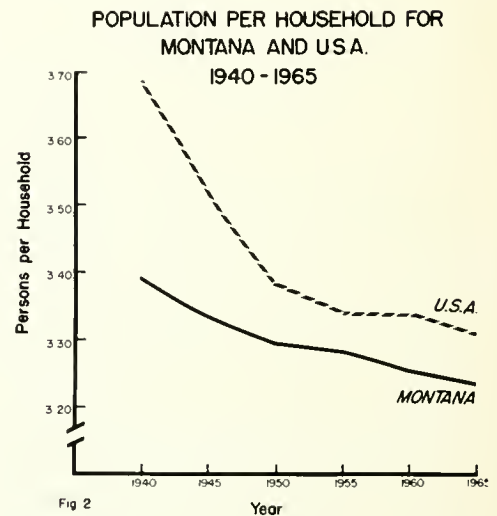
PART II. MONTANA'S FAMILIES

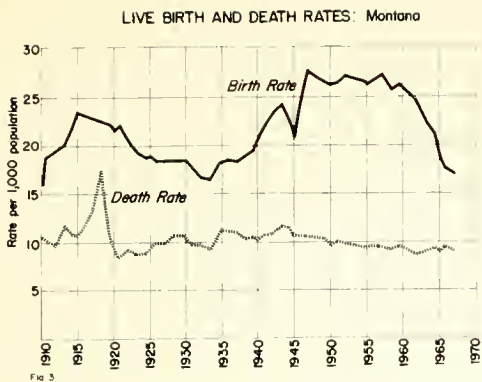


It Will be Noted There Has Been a Steady Increase in the Number of Households* in Montana Between 1940 and 1965. Predictions to 1985 also Indicate a Continuing Increase, Probaby Due to (1) the Marriages of Persons Born During the "Baby Boom" of the Late Forties and Early Fifties; (2) More Older People Living by Themselves Since There is More Housing for the Establishment of Separate Housing Units and (3) Because More Young Adults Formed Separate Housing Units from their Parents.

*A household includes all people in a housing unit; a house, apartment, or other group of rooms; a single room in a housing unit when or intended to be used as separate living quarters.

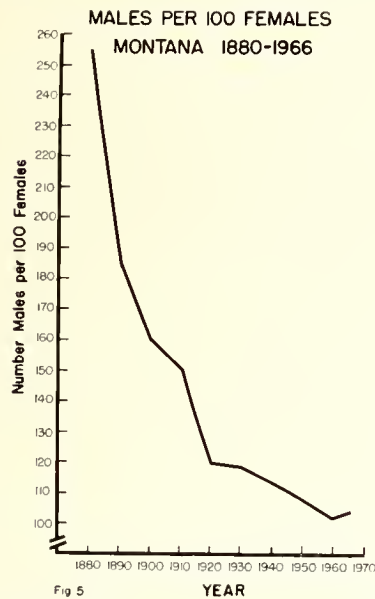
Between 1940 and 1965 the Population Per Household Declined Steadily. Predictions for the Nation Show a Continuing Decline, Except for One Series Out of Eight Which Predicts a Higher Population per Household in 1985 than in 1965. The Lowest Prediction for 1985 is 2.81. The Same Explanations Given Under the "Number of Households" Explains This Situation Also. Montana is Expected to Follow the Predicted National Trend.



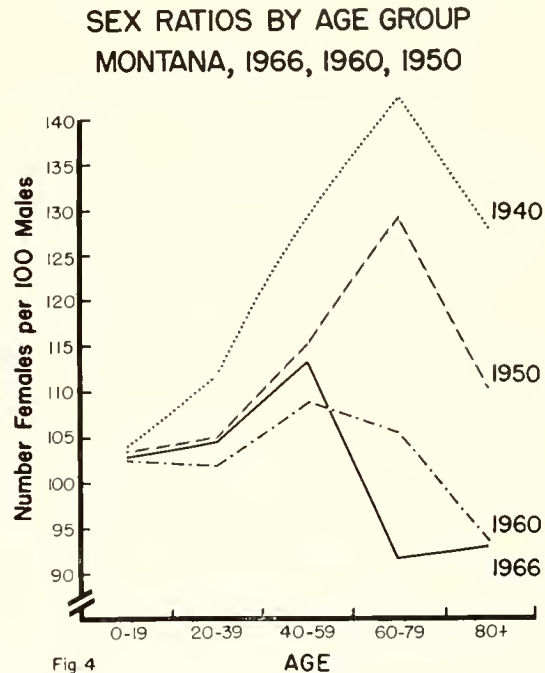


The Decline in the Birth Rate Which Began in 1947 is Continuing. The Number of Women in the Child Bearing Age Has Been Declining and Often People Wish to Postpone the Arrival of Their First Child for a Longer Period After Marriage Than in Earlier Years. However, Because the People Born During the "Baby Boom" are Now Marrying and Will be Having Their Own Children, the Birth Rate is Expected to Rise.

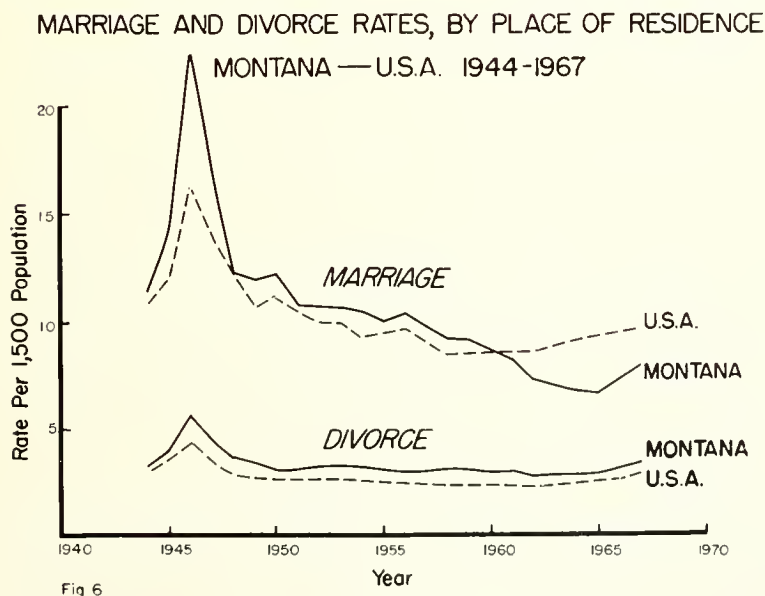
The Death Rate is Expected to Remain Approximately the Same.



Except for a Slight Increase in 1966, the Number of Males per 100 Females has Continuously Decreased. However, there are Still More Males than Females in this State.



Up to Age 59, the Lowest Sex Ratio Occurred in 1960. In the 60-69 and 80 and Over Age Groups, 1966 Sex Ratios are Lower. This Probably is Due to the Increased Life Expectancy in Women, Which Means More Women are Surviving into the Later Ages than Are Men. Beginning in 1960 There Has Continued to be More Females than Males in the 60 and Over Age Groups.

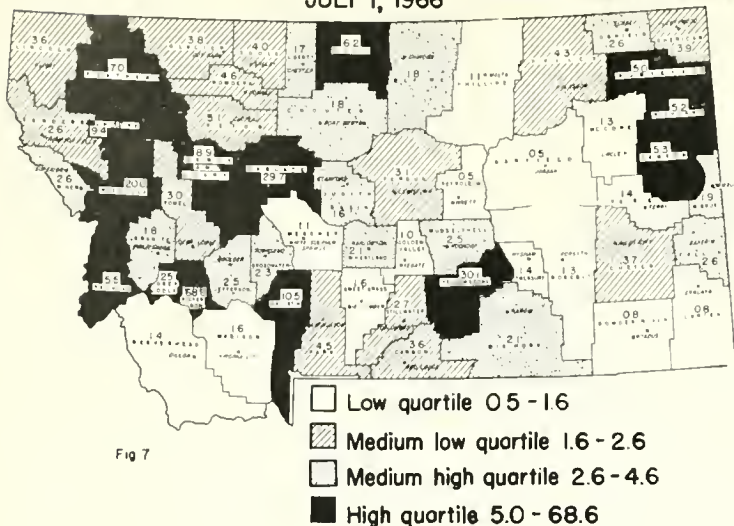


Marriages were Higher Until Montana Legislation Curbed the Ease with Which Persons Could Obtain a Marriage License. Both the Rates for the United States and for Montana are Now Increasing Since the Girls Born During the "Baby Boom" are Now of Age. When the Boys Born During that Period Become of Age, the Rate Should Increase Even Further.

Divorces are Continuing to be Higher in Montana Than for the Nation as a Whole.

POPULATION DENSITY OF MONTANA COUNTIES

JULY 1, 1966 Montana: 4.8 per square mile



There has been a Shift in the Population Density in Several of Montana's Counties During the Last Few Years, with a Decrease in 17 Counties.

PERCENT CHANGE IN MONTANA'S POPULATION, BY AGE, 1960 - 1966



Between 1960 and 1966 There Has Been An Overall Increase in the State's Population of 4.0%. Although this Increase Has Been Steady, the Population of Young Adults in the 20-39 Year Age Group has Decreased Steadily Year After Year, Beginning in 1920. Thus with this Trend Combined with the Declining Birth Rate, it is to be Expected that the Population Under Six Years of Age Should Also Decline.

In the Decade 1950-1960, the Number of People in the Dependent Ages Increased Sharply. This Brought About an Increase in the Number of Dependent Persons Who Had to be Supported by Those of Working Age. In 1966 the Proportion of Persons in the Dependent Ages and the Persons in the Working Ages Remained About the Same as in 1960, with 49½% Supporting 50½% of the Population.

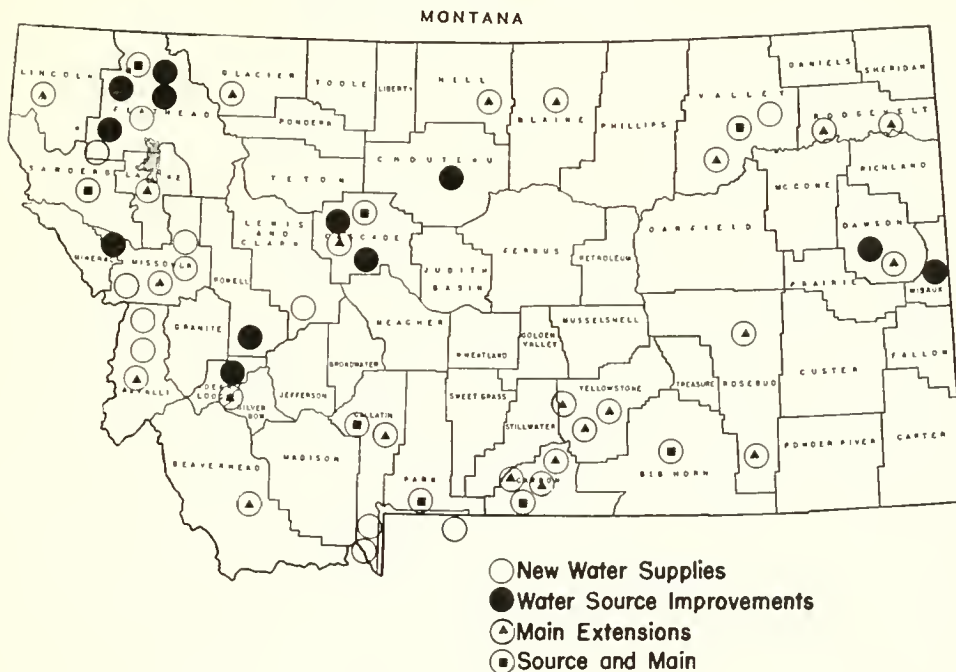
PART III. FAMILY SURROUNDINGS

The Department has responsibilities in many areas of the environment that affect the health of Montana's families. Among these responsibilities are: Safe Water Supplies; Adequate Sewage Treatment and Disposal; Stream Pollution Control; Food and Drug Control; Food and Restaurant Sanitation; Housing, including the approval of School and Swimming Pool Construction; General sanitation, including Solid Waste Disposal Supervision; Hotel-Motel-Tourist Room Sanitation; Pesticide and Shoddy Control; Industrial Hygiene, and Radiological Health.

Municipal Water Supplies

Montana's families, living in 194 Montana municipalities, are provided with safe drinking water supplies. The water from these supplies is tested at least once a month and many of them more frequently. There were over 16,000 water samples from municipalities which were tested bacteriologically during the biennium. All supplies are visited and evaluated by an engineer at least once a year with a total of 457 inspections made.

WATER SYSTEM IMPROVEMENTS July 1, 1966 — June 30, 1968



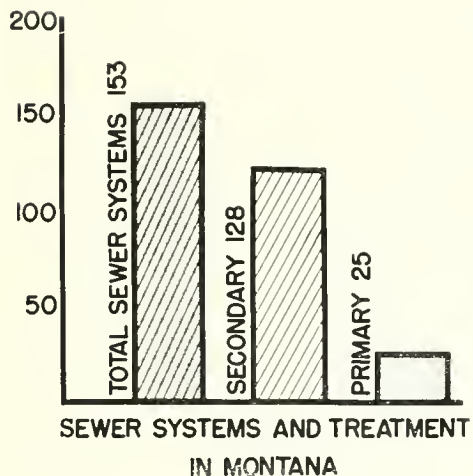
New Water Supplies of the Evergreen Community Near Kalispell, and the Community of Seeley Lake were Approved. Preliminary Reports for Proposed Water Systems are Being Developed for Ulm, Columbia Heights near Columbia Falls, Victor and Martinsdale. Renovation of the Water Supplies for Bear Creek and West Glacier Will Soon Be Completed.

During the Summer of 1967 the Water Supply in the Town of Roundup was Flooded During the Mussel-shell River Flood. When the Waters Receded, the Clean-up of Buildings Flooded and Other Damage Required Services from Many Sources, Including the SDH Staff.

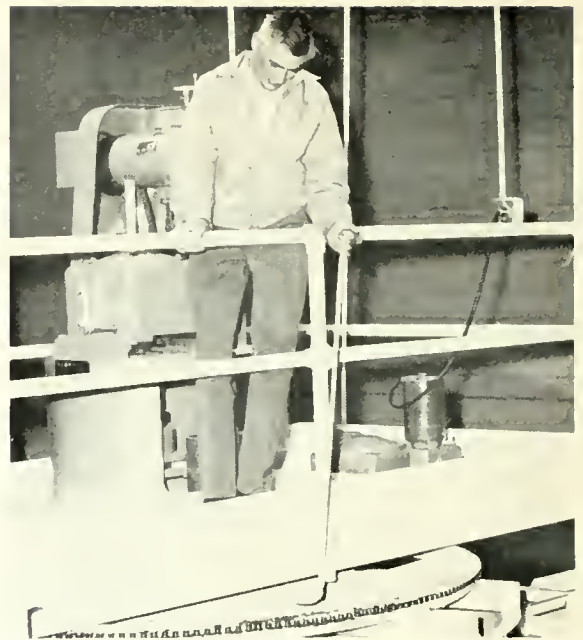
The Receding Water Left Many Pot Holes Which Provided Mosquito Breeding Areas. Fortunately, on Checking, it was Found that there was no Area with a Large Number of Mosquitos Carrying Western Equine Encephalitis. There have been Sixteen New Subdivisions with Community Water Systems Constructed. Over 150 Subdivision Developments, Many of Them Small, Were Approved.

Sewage Treatment and Disposal

There are 53 communities having sewage disposal facilities that are supervised. There were 415 visits made to these facilities by a trained public health engineer. His visits provide contact with the person actually operating these facilities so that instruction and advice may be given to up-grade the quality of the operation.



Six New Sewer Systems with Treatment Facilities and Six New Waste Water Treatment Plants have been Designed to Replace Old Plants and Facilities. Before Construction can Begin, SDH Approval of the Plans is Required. All Water and Waste Water Plant Operators in Charge of the Facility Must Now be Certified as to Their Qualifications. This Requirement was Brought About by 1967 Legislation. It is Expected this will Bring About a Greater Incentive for Operators to Become Better Qualified for These Positions of Responsibility. The Director of the Division of Environmental Sanitation is the Secretary and Director of this Certifying Board.

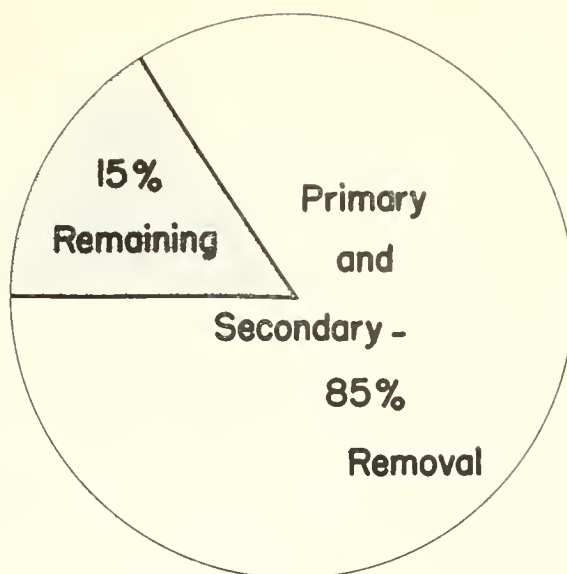
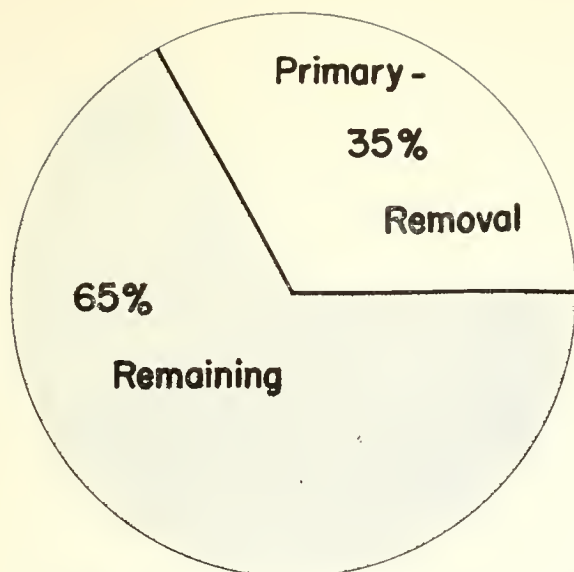


A Water Plant Clarifier to Remove Iron from the Municipal Water Supply at Glasgow Has Been Installed. The Water Plant Superintendent is Shown Above Sampling the Water Supply After the Iron has been Removed.

Water Pollution Control

New water quality standards to control the quality of water in all the State's surface streams have been adopted following a public hearing. These standards upgrade the former standards and establish minimum treatment of all waste discharged into the streams in Montana. These water quality standards form a base-line which will be adhered to in maintaining water quality throughout the State.

During the summer of 1967, water containing heavy metals created toxic conditions in the Clark Fork River. This was caused by shutting down the Anaconda Company operations in Butte at the beginning of a strike. The first large quantity of heavy metals escaped because the striking employees being off the job, there was no one to operate the facilities designed to remove these heavy metals. But steps were soon taken to correct this situation.



REMOVAL OF ORGANIC MATERIAL (BIOCHEMICAL OXYGEN DEMAND) BY PRIMARY AND SECONDARY TREATMENT

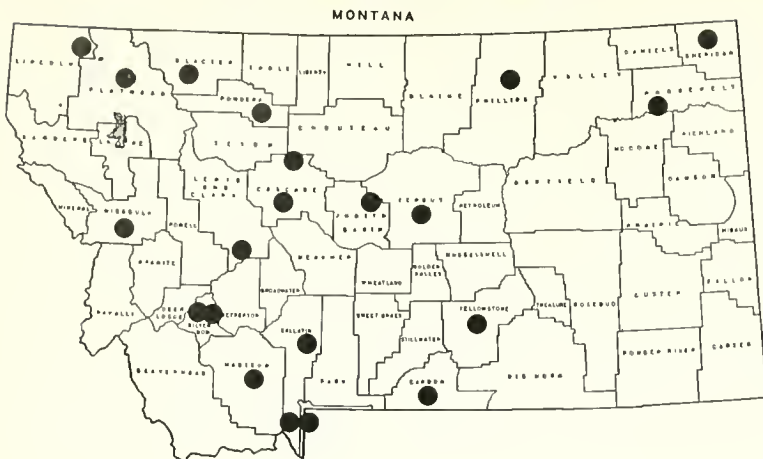
The Graphs Illustrate the Improved Condition of Sewage Discharge After it has Received Secondary Treatment as Compared with its Condition After Only Primary Treatment.

Permits are now required before a waste can be discharged into a stream. Before the permit is granted there are requirements that must be met which are relative to the type and the degree of treatment a waste must receive before discharge. This was brought about by 1967 legislation and put into operation during the last quarter of the biennium. It is now in operation in practically all of the State and would have eliminated the condition created by the Anaconda Company strike had it been in operation at that time.



Members of the State Water Pollution Control Council Took to the Field to Observe Water Pollution Control Activities. The Council Adopts Policy which is Carried out by the SDH Staff. The Council's Goal is to Maintain the High Quality of Montana Streams.

PLANS APPROVED FOR NEW SWIMMING POOLS July 1, 1966 — June 30, 1968



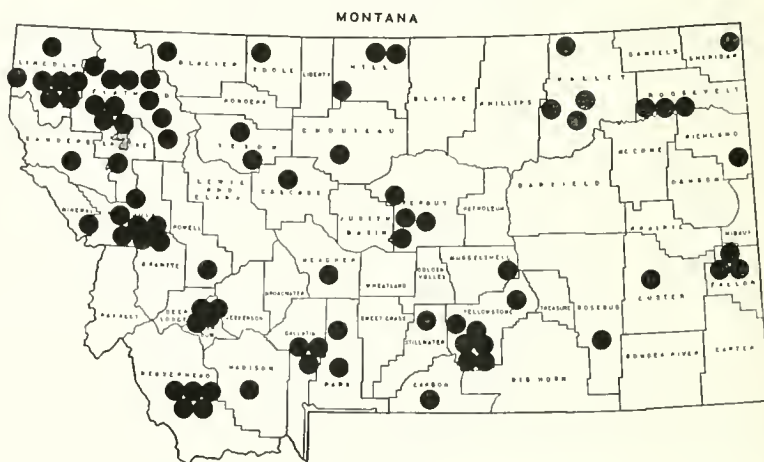
Plans for 21 Swimming Pools were Approved. Among these was a New Swimming Pool for the City of Lewistown to Replace the Pool Constructed in 1916 and Considered to be a Hazard to Those Who Used the Pool.

SDH Approval is Required before New School or School Remodeling Construction Can be Started.

Food and Drug Control

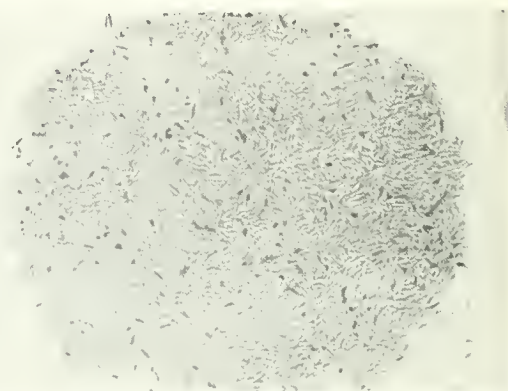
Montana's Food and Drug Control legislation was up-dated by the 1967 Legislature when the Uniform Food and Drug Act was enacted. Prior to this, Montana's law, which was tied to the 1907 Federal Food and Drug Act, was most difficult to enforce since it was not compatible with the present day Federal Act. The new legislation solves this problem.

PLANS APPROVED FOR NEW SCHOOLS July 1, 1966 — June 30, 1968



Food Sanitation

Pesticides were found in excessive quantity in Gallatin Valley Milk. This necessitated the condemnation of cheese made from this milk. In working on this problem, the SDH staff and the Livestock Sanitary Board cooperated to better handle the situation.



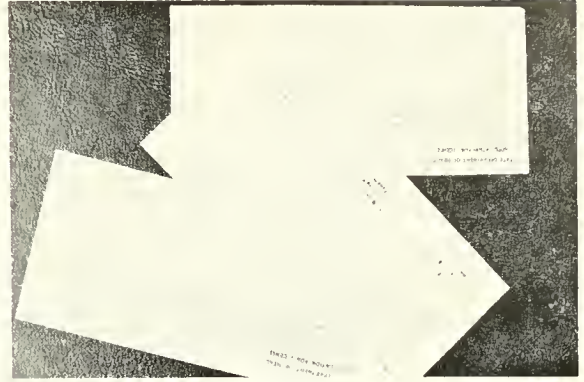
Mouse Dropping Contamination in 105,000 bushels of Barley Made it Necessary to Separate and Clean the Barley.

LICENSING PROCEDURE — ENVIRONMENTAL SANITATION



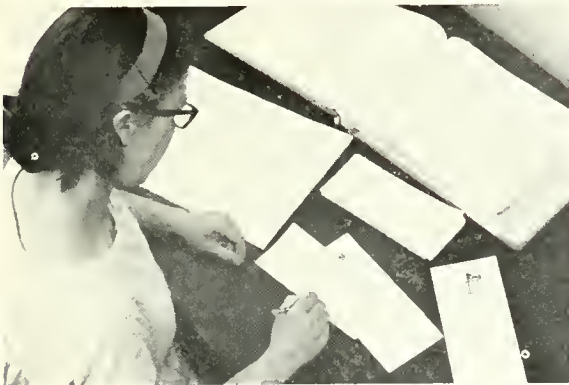
Step 1.

Codes and Standards Together with the Montana Laws Upon Which They Are Based, are Made Available in Printed Form to Licensees.



Step 2.

The Licensee Makes Application for a License on Forms Provided by the SDH.



Step 3.

On Receipt of the Application the SDH Staff Processes Them.



Step 4.

The Establishment is Inspected Before a License is Issued.

DIVISION OF ENVIRONMENTAL SANITATION

LICENSES ISSUED IN 1968

TYPE	NUMBER
FOOD PURVEYOR LICENSE <i>(Restaurants, taverns, food manufacturers, meat markets)</i>	3600
TOURIST CAMPGROUND and/or TRAILER COURT LICENSE	750
HOTEL, MOTEL, or TOURIST HOME LICENSE	850
TOTAL	5200

Step 5.

The License is Issued if the Establishment Meets the Requirements. During the Biennium the Licenses Issued for Food Purveyors was Consolidated and are Now Handled by Data Processing Equipment. This New Procedure has Made for Improved Efficiency and Convenience in the Licensure Program. Lists of Licensed Establishments can Be Secured on Request. Persons Making Requests Must Make Payment for this Information Directly to the State Department in Charge of Data Processing.

Environmental Surveys

Environmental surveys are made in local communities when requested. As an example, the factors considered and their value are illustrated in the summary for the survey conducted in Butte:

—Environmental factors

Housing was classified and mapped on a house-to-house basis with such factors as garbage, rubble, abandoned automobiles, dilapidated sheds and animals considered.

Using this housing classification information, infant death density and other factors, the community was stratified into three socio-economic areas, high, middle and low. The correlation between poor environmental conditions and infant death densities correlated quite accurately and made it possible to define the problem areas in the community.

—Health Index

Using the stratification information, this survey was designed to determine immunization levels and disease experience in the three socio-economic areas of the community.

—Restaurant and bar sanitation ratings

This survey was conducted by selecting a random sample of licensed establishments and classified them in accordance with the PHS procedure for evaluating eating and drinking establishments.

The surveys were conducted by local public health staff and citizens in Butte with assistance from the State Department of Health and the Public Health Service.

The information was given to city and county officials, health professional groups and citizen groups with the result that an awareness was created for the establishment of a full-time city-county health department. There had been many other attempts made to bring about the establishment of this department, but this was the activity that made it a reality. On July 1, 1968 the full-time health department was started.

There has also been extensive use of the survey information for other purposes such as in the establishment of the metropolitan sewer system, the justification for OEO funds, and in obtaining the Model Cities Planning Grant. Other uses of this information are anticipated in the future.

Hotel-Motel-Tourist Room

Legislation became effective January 1, 1968 and Regulations were adopted following a public hearing. This law is intended to provide for an improvement in the sanitation of these facilities.

Solid Waste Disposal

A stepped-up program to improve solid waste disposal in Montana's 514 communities was initiated in June 1967. Solid waste includes garbage, rubbish, ashes, offal, manure, construction and industrial wastes. With the national average of 4.5 pounds of refuse discarded by each person per day, it means that in Montana, approximately 1,650 tons of refuse must be disposed of every day.

If needed, improved methods of solid waste disposal are recommended in each community as a survey of present methods is being made.



This is a Poor House and It Is Not Worth Reclaiming.



This is a Good House. It Is Not New but It Has Been Well Kept Up.



Open, Burning Garbage Dumps are No Longer Acceptable. They Create Places for Insects, and Rats, and Even Feeding Sites for Grizzly Bears.

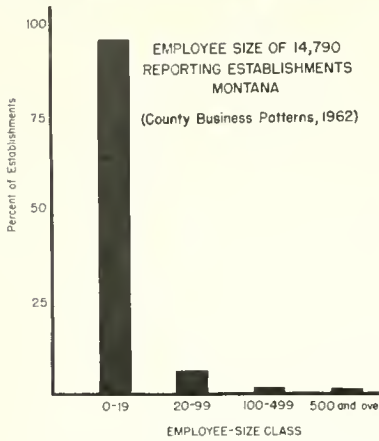


Area Sanitary Landfill Dumps, as Shown on the left are Approved for Solid Waste Disposal as is the Trench Type Sanitary Landfill as Shown Below.



The Area in Which the Landfill is Located Should be Fenced for Proper Operation.

Industrial Hygiene



The Industrial Hygiene Program has been curtailed to a large degree during the last two years because it has been impossible to recruit qualified staff. When half the time of one person is devoted to this program which really needs the time of four persons, not much of a dent can be made in solving the occupational health problems of the State.

Another handicap is illustrated in the accompanying graph which shows the large number of small businesses where there are less than 20 employees, as compared with the small number which are large enough to employ their own occupational health personnel. The amount of time it takes to serve many small places compared to one large establishment, even though there may be the same number of employees in each instance, is also handicapping.

Small operators cannot usually afford to employ an experienced ventilation design engineer so a large part of the time of the industrial hygienist is spent assisting in the design of proper ventilation and in the modification of improper systems. Money is wasted on

poor ventilating systems in many industries if they are not properly designed.

It is estimated that there are as many as 10,000 men working at jobs in Montana that could cause permanent injury to their health. This involves a wide variety of conditions, varying from hearing loss, silicosis, dermatitis to lead poisoning. Hot jobs or jobs producing excessive heat can cause considerable physical stress, many of them have been identified and the heat stress index measured; however, its measurement is complicated. This evaluation is particularly valuable to workers who have heart disease.

A few other occupational health problems are noted in the illustrations below.



Ventilation to Carry Tailpipe Exhaust Fumes Outside a Garage is Important to Protect the Mechanics and Others from Carbon Monoxide Poisoning and Other Contaminants from Car Exhausts. A Recent Study of 300 Garages in Montana Shows that 25% had No Such Ventilation System, 25% Had Excellent Ventilation and the Remainder had Some but Less than Adequate Systems.



It is Well Established that There are Health Hazards Created in Welding Operations When the Welders are Not Protected from the Fumes of Lead, Zinc, Cadmium, and Gases of Oxides of Nitrogen and Ozone. There are All Too Few of Them Protected at the Present Time. Only a Few of the Shops in Montana's High Schools Have Adequate Ventilation for their Welding Classes.



Noise is an Acute Hearing Hazard When It Is Loud and the Person is Exposed to it for Long Periods of Time Without Adequate Protection. Persons Working in Mining, Milling, Lumbering, and Sawmilling Need Protection from Noise. Loud Music is a Health Hazard to Players or Others Exposed to it for Long Periods of Time.

Noise Can Be Evaluated in Terms of Level, Octave Bands and Duration. Recommendations Can be Made for Proper Protection of the Exposed Persons such as the Protectors Worn Over the Ears of the Airport Employee shown on the left.

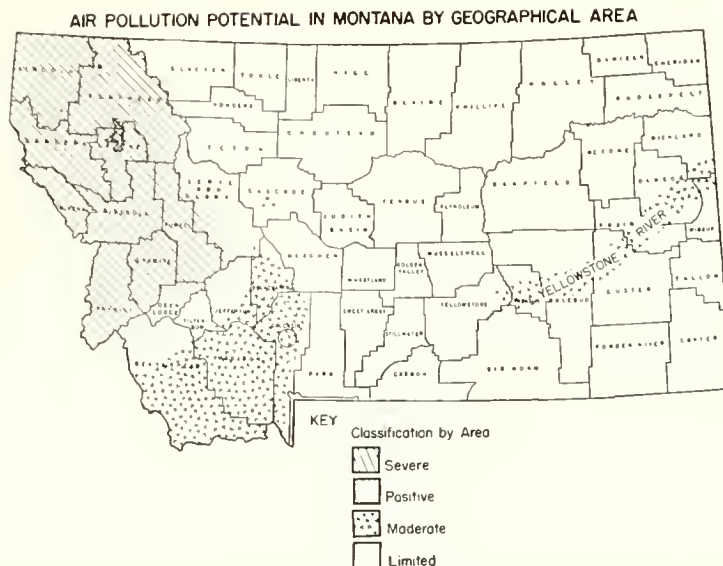


Conscientious Reporting by Physicians, Labor, Hospitals and Industry Would Result in a Dramatic Reduction of Job-oriented Illness.

Air Pollution Control

Contrary to popular belief, Montana — The Big Sky Country — does have air pollution problems. Some of the causes of this pollution are shown in the accompanying map and illustrations.

Estimate of



Certain Areas of Montana, Due to Meteorological and Geographical Conditions, Have Greater Potential for the Development of Some Air Pollution Than do Other Areas of the State. Critical Localities will be Noted as: The Missoula, Flathead, Libby, Gallatin, Helena and Deer Lodge Valleys; the Laurel-Billings Region and the Butte Basin.



Wood Waste Disposal is a Vexing Air Pollution Problem. Total Utilization of Wood Waste is the Long-Range Solution to this Problem but in the Interim, Alternative Methods of Disposal or Improved Burning Methods Must be Found.

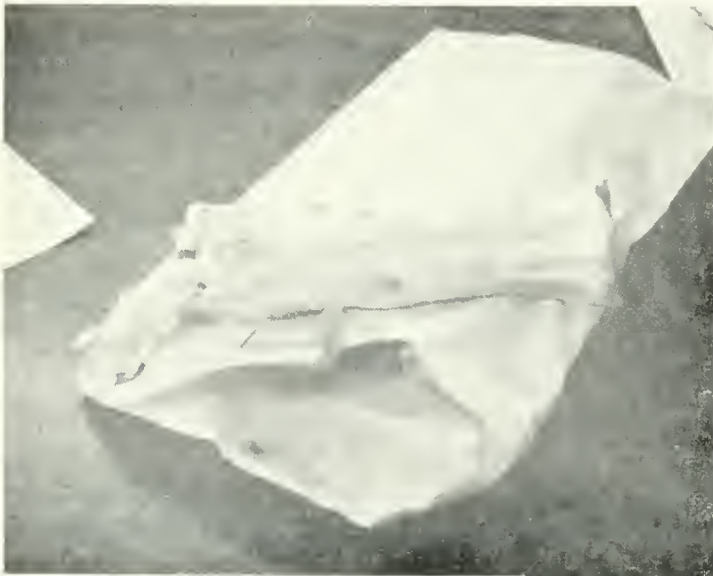
Open Burning of Refuse Just Outside Towns and Cities, Such as is Pictured on the Left Outside Billings, is a Constant Source of Unnecessary Air Pollution.



Asphalt Paving Plants Continue to Produce Gross Pollution as Shown on the Right, Even Though Controls Have Been Available for Many Years.



Multiple Sources of Air Pollution as Shown at this Refinery Pose Problems to the Industry and the Control Agency.



Whereas, All Damage Caused by Air Pollution Cannot be Seen, There are a Few of its Effects Shown Above on the Leg Bone of a Cow. This Damage was Caused by Fluorides and was Extremely Painful to the Animal Affected. The Bone is Normally Smooth and Straight. On the Right, Air Pollution Damage to Vegetation is Shown. Known Pollutants in Montana are Sulfur Dioxide and Fluorides.



To **control air pollution**, the 1967 legislature enacted an air pollution control law which requires that the State Board of Health develop air quality standards. These standards were adopted with the assistance of an Advisory Air Pollution Control Council. The appointment of this Council is included in the law and its responsibility is to advise the Board on matters pertaining to air pollution control.

Time tables have also been set for over 100 pollution sources which gives the management of each source a certain amount of time to comply with the control requirements.

When new construction which has a specified potential to pollute the air is planned, a permit must be obtained from the Board. Before a permit is granted the knowledge of the procedure to be utilized and information about the equipment's ability to reduce air pollution must be explained.

Early in the next biennium the Board will adopt emission standards and certain other regulations to control air pollution in the State. Conferences have been held with wood products industries, petroleum refining managers and a number of other companies, with mayors and county commissioners regarding their air pollution problems.

Air pollution studies are a continuing activity of the SDH staff. The studies underway or completed during the biennium are as follows:

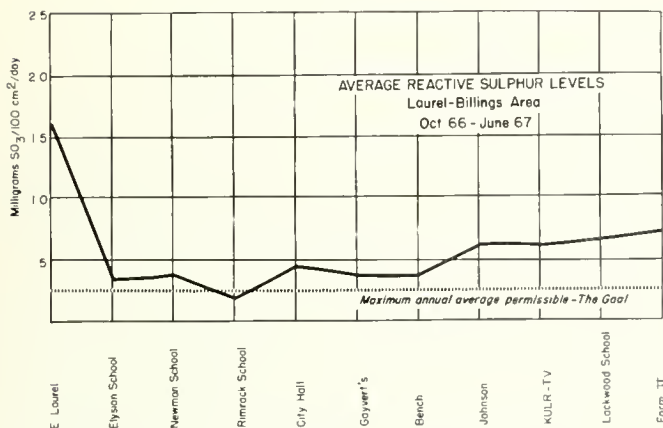
Study	Status
Deer Lodge Valley—Garrison to Anaconda	Completed and the Report has been published
Laurel-Billings Area	Completed and the Report has been published
Helena Valley, including Helena and East Helena	Completed and the Report is ready to be published
Townsend, Three Forks and Gallatin Valley	Started June 1967 to go on through June 1969
West Yellowstone	Started May 1968 to go on to November 1969

A typical study will involve a collection of approximately 3,000 samples. The results obtained from these samples will define the air quality of the area being studied in terms of suspended particulate, the entire fraction of the suspended particulate, lead, arsenic, fluorides, water soluble sulfates, sulfur dioxide and perhaps hydrogen sulfide and other materials. In addition, soil and grass samples are evaluated during the study period

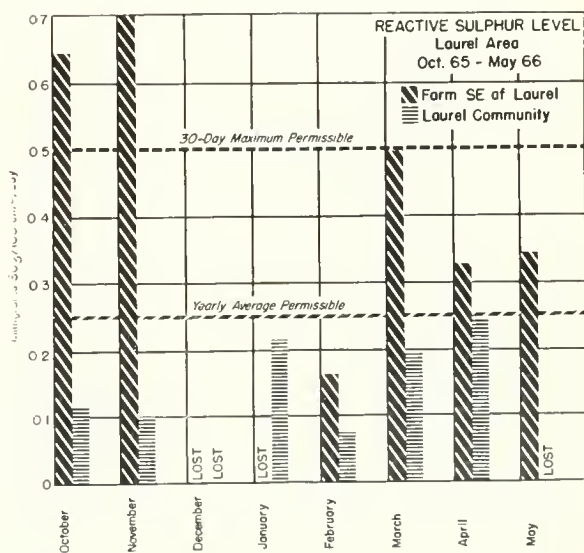
The Small Trailer Serves as a Mobile Sampling Station and Laboratory. It has Improved the Capabilities of the Department Substantially. Instruments Used with the Trailer are Sulfur Dioxide and Hydrogen Sulfide Monitors, Weather Instruments, Suspended Particulate Samplers and Others.



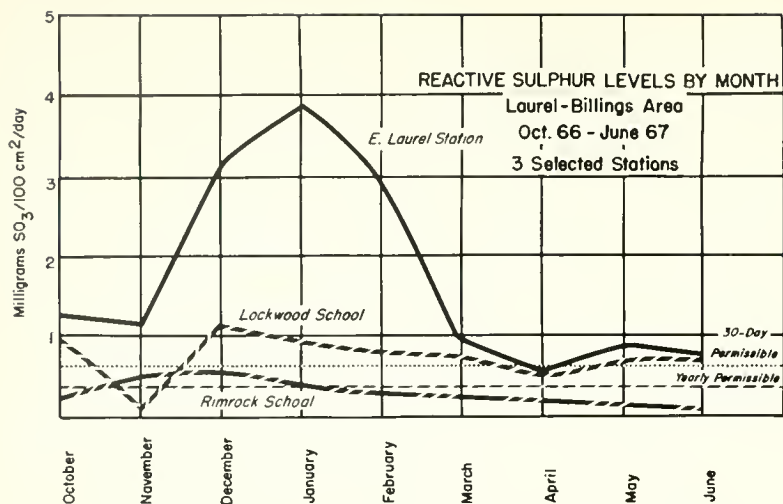
The graphs below are taken from the Laurel-Billings Report on the Air Pollution Study made in 1966 and 1967.



Reactive Sulfur (sulfur dioxide and hydrogen sulfide) Are Excessive in Billings, Anaconda and East Helena.

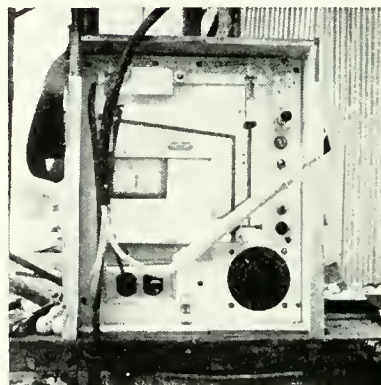
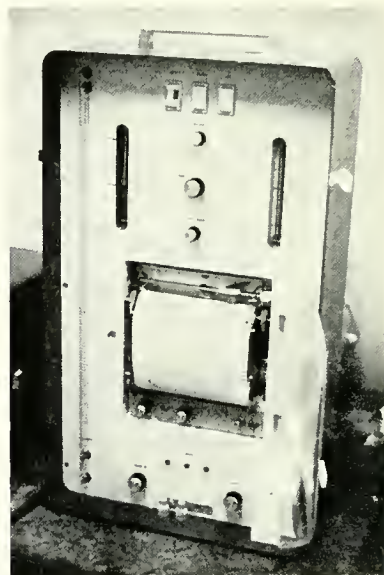


Reactive Sulfur is a Problem in Several Areas of the State.



Reactive Sulfur is Excessive in Billings, Anaconda and East Helena. Other Contaminants such as Suspended Particles and Fluorides are Excessive in Other Communities.

Expensive and Often Times Elaborate Equipment is Essential in Air Pollution Studies and in Control. The "Automatic" Sulfur Dioxide Analyzer-recorder Shown on the Right Cost \$3,000. Although "Automatic" it Requires Attention Twice Daily.



Sampling of Stack Emissions is Sometimes Necessary, but is Costly and Tedious. Sampling may have to be Repeated Many Times to "Catch" Variation in Plant Operations. Sampling Equipment Must be Durable and Accurate.

The technical problems encountered in the Montana Air Pollution Control Program are (1) lack of specific technological data and (2) the control of certain pollution sources such as the tepee burner and the control of sulfur dioxide.

However, progress is being made. A number of industries have voluntarily begun to investigate ways of substantially reducing emissions from their plants and some have submitted their plans for plant and equipment improvement.

The establishment of local control programs is being urged. There has been a positive response from the Missoula area and from Billings and Yellowstone County area. It is anticipated that local air pollution control programs permitted under the 1967 legislation will be established by 1969. This should aid materially in air pollution control since certain pollution sources or programs are more efficient when they are administered at the local level.

Radiological Health

Steps have been initiated toward meeting the requirements of the Radiation Control legislation adopted by the 1967 legislature.

An Advisory Committee whose appointment is required in this law has been appointed and has held two meetings. An employee working full-time on radiation control has been assigned.

A survey locating the X-ray units and other sources of ionizing radiation has been completed. The accompanying graph shows by occupational category of the healing arts where the 938 X-ray units in the State are located. This survey was needed before an inspection program could be initiated.

A random sample survey of these units is now underway. The purpose of this survey is to determine compliance with national standards. It is a follow-up of surveys conducted between 1958 and 1965. The results of the present survey will also establish the workload and provide a bench mark from which progress in the future may be measured.



Radiation at One Meter From its Source is Being Measured in Order to Determine Compliance to the Standards for Gamma-Beam Therapy Equipment.

Rules and regulations to aid in carrying out the requirements of the law regulating ionizing radiation sources are under development and will be reviewed by the Advisory Committee at its next meeting for suggestions.

The air surveillance network initiated in May 1967 and the collection of milk and precipitation samples begun in 1960 is continuing in an effort to determine radiation activity in the State.

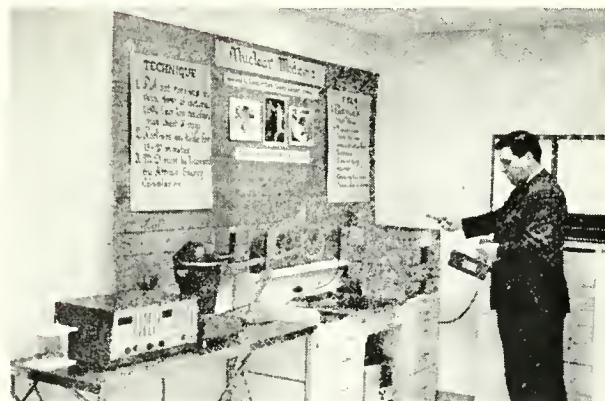
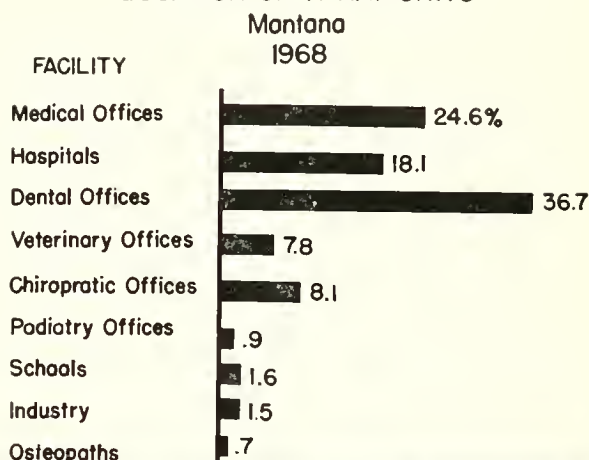
In addition to the regulation of radiation sources the program is also aimed to promote an orderly regulatory pattern within the State, among the States and between the Federal government and the State. It is also expected to facilitate intergovernmental cooperation with respect to use and regulations of sources of ionizing radiation to the end that duplication of regulation may be minimized. The program is to be developed so that maximum utilization of sources of ionizing radiation will still be consistent with the health and safety of the public.

These efforts are necessary so that the State may enter into an agreement with the Atomic Energy Commission.



The Advisory Committee to the Radiological Health program Provides Helpful Guidance to the SDH Staff.

LOCATION OF X-RAY UNITS



Medical Isotopes are Measured in Order to Determine Compliance with Standards.

PART IV. PROTECTING FAMILY HEALTH

CHRONIC DISEASES AND CONDITIONS

Nutrition Services and Consultation

In many of the chronic diseases special diets are prescribed by the practicing physicians. The SDH nutritionists' services are available for consultation to the patients on physician request.

Many small hospitals and nursing homes in Montana had no dietary departments nor dietitian services. The SDH nutritionists have developed an interest in many communities in providing such services.

Unemployed dietitians have been sought out and the needs of these services in their own communities have been explained to them. To help prepare them to "come back to work" the SDH staff conducted a short course on dietary consultation. The result has been that the number of dietitians employed in the State has doubled and there are twice as many employed in health facilities as there were.

Educational activities include in-service training, and informational meetings. Among the topics for which information is most often requested are diabetes, heart disease, obesity, food fads and fad diets, food safety in the home and community.

Diabetes Control

With the availability of a new blood test suitable for mass screening for diabetes, a diabetes control program was initiated during the last half of the biennium. The importance of mass screening is due to the fact that about half the adults with diabetes do not know it, and hence do not seek medical care early enough.



Community Committees Assist in Planning Diabetes Screening Programs, Conduct Educational Programs, Motivate Participation in the Screening and Carry Out Many Other Activities that Make the Program Successful.

Volunteer Nurses are Trained to Administer the Diabetes Screening Tests by a SDH Nursing Consultant. Persons with High Glucose Levels are Counseled and Advised to see Their Family Physicians for More Complete Testing, Examination and Diagnosis.



The SDH Staff Conducted a Short Course on Dietary Consultation.

The new colometric test measures the glucose concentrations per 100 milligrams of blood. This is done by putting the blood drawn from the finger tip on a "dextrostix." The dextrostix colors and its color is matched to a color chart indicating the glucose concentration. The screening test is not a diagnostic test, merely a test which indicates persons suspected of being diabetics. Such persons are then referred to their physicians for examination, further testing and diagnosis.

The program is aimed to reach as many of the adults 25 years of age or older and persons of any age who have a history of diabetes in the family or have other high risk factors. To assure this, the community is organized. With the participation of many individuals in education and motivation programs, excellent responses have been attained. The results of the programs conducted so far are: Chouteau County—1107; Judith Basin County—523; Teton County—1749; Liberty County—841; two neighboring communities, Whitehall in Jefferson County and Cardwell in Madison County—423.



Cancer Control

Cancer continues to be the second leading cause of death in the 35-44, the 45-54 and the 55-64 age groups in Montana and it ranks third among the 5-14, the 25-34 and the 65 and over age groups. The SDH cooperates with the Regional Medical Program on Heart, Cancer and Stroke in attacking the problems of these conditions.

An education program initiated in 1964 is still "paying off" in that women in many of Montana's communities are reporting to their physicians for a cervical examination annually. However, this program needs to be expanded since the cervix is one of the sites in the body where deaths from cancer do not need to occur.

In a few of Montana's counties SDH pays for cervical examinations for women referred by the Welfare Departments. This program has increased during the biennium.

The SDH compiles data for the Butte and Missoula Tumor Clinics and provides information for this data to physicians making inquiries. The Department also assists in professional and refresher courses for the medical staff that conducts these clinics.



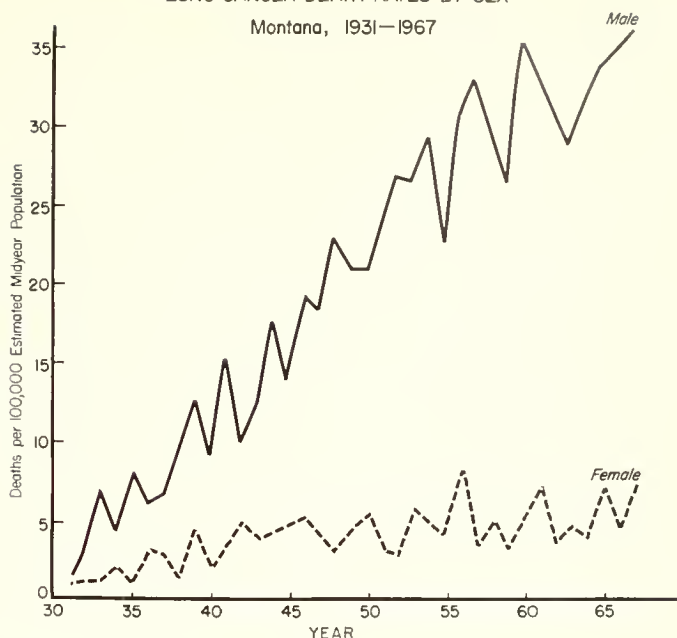
The Group Discussion Technique is the Educational Method Most Often Used in Assisting Youth and Adults to Make a Decision on Cigarette Smoking. Discussion Follows the Presentation of Scientific Information.

Heart Disease Control

Heart Disease is a problem to all age groups, beginning with the infants born with congenital heart defects, and extending to those 45 years of age and over where heart disease is the leading cause of death. To attack this serious health problem, the SDH and the Regional Medical Program are cooperating.

Some forms of heart disease are directly related to cigarette smoking and the "Smoking and Health" program is aimed to help reduce disability and death from this cause. An improvement in heart conditions is noted almost immediately when a patient stops cigarette smoking or even reduces the number of cigarettes smoked. This is a much faster recovery than the cessation or reduction of cigarette smoking has on lung conditions which may take as much as six months before changes are noted.

LUNG CANCER DEATH RATES BY SEX



What Has Caused the Increase in Lung Cancer in Montana During the last 30 Years? Why Does the Death Rate Among Males Show Such a Spectacular Increase?

Smoking and Health

Since cigarette smoking is one of the major contributing factors to lung cancer and also because it has a profound effect on certain diseases of the heart, an educational program on the hazards of cigarette smoking was initiated in September 1967. It is primarily directed to youth and young adults and those who work with these age groups. Its goal is to help young people make a wise decision on the question, "to smoke or not to smoke," and to aid persons young and old who have started, to either stop smoking or cut down on their cigarette consumption.

The program is carried out with the advice and counsel of an Interagency Council.

Since **rheumatic heart disease** may develop following rheumatic fever attacks, the prevention of recurring attacks is the first line of defense. These recurring attacks can be prevented with the administration of prophylactic drugs prescribed by the patients' physicians. To make these drugs available to everyone needing them, the Montana Heart Association provides a low-cost program and the SDH provides the drugs to those who cannot afford even the low-cost program. The SDH distribution of these drugs was transferred from the Helena SDH office to the Rheumatic Fever and Heart Diagnostic Center in Great Falls during the biennium.

An educational program on Rheumatic Fever and Rheumatic Heart Disease has been ongoing for several years in Montana Colleges and Universities. This program includes students who have been diagnosed as having had rheumatic fever or rheumatic heart disease. This program needs to be expanded and directed to lower age groups since the College freshmen are asking the same questions about this disease in 1968 that were being asked by College freshmen in 1955.

A case-finding program, aimed at finding suspected heart disease among school aged children was carried out in Gallatin and Judith Basin Counties during the biennium. **This was a heart sound screening program**, using a phonocardioscan which provides the preliminary analysis of heart sounds. It is operated by a trained technician and determines which children should be referred for a medical examination to determine if heart disease is present.

In Gallatin County the program was sponsored by the local Medical Society, the Gallatin City-County Health Department, City and County School Systems and the SDH.

In this County there were 6,691 students (99.2% of the total school enrollment) screened and 372 were referred to their physicians for examination. In Judith Basin County there were 715 students screened and 11 referred to their physicians.

In Gallatin County, Heart Disease was demonstrated in 45 of these 372 children; 24 with congenital lesions; 20 rheumatic lesions and one primary pericarditis. There were 15 of the 45 children referred who had not been previously known to have heart disease or had not been fully diagnosed by their family physicians. The heart disease case rate was 6.4 cases per 1,000 school children.

Of the total number of children with diagnosed heart disease, the distribution between congenital heart disease and rheumatic heart disease is approximately equal.

In addition to finding unknown and previously untreated heart disease, this program has also made a contribution to "de-labeling" children who were once thought to have heart damage. The unnecessary restriction of activity to those children who do not have heart disease together with the psychological implications are in themselves health hazards, if not corrected.

The SDH sponsors two **Rheumatic Fever and Heart Diagnostic Centers**. From the initiation of the program twelve years ago until this biennium, children and adults were both seen at the Center in Great Falls. However, because an adult cardiologist was no longer available in Great Falls, the adults are now seen at Missoula.

These centers provide consultative and diagnostic services to Montana physicians for the patients they refer with rheumatic fever, rheumatic valvular heart disease and congenital heart disease. They also provide in-service professional education and participate in the prevention of rheumatic fever and its crippling effects.

The referrals of children under 21 years of age are made directly to the Center in Great Falls where the full-time City-County Health Officer serves as the medical administrator. The medical director is a pediatric cardiologist. Referrals of adults are made to the Division of Disease Control in the State Department of Health and are given appointments at the Missoula Center in the Western Montana Clinic. There are two adult cardiologists and the SDH also purchases social work services.

Persons, both children and adults, requiring complicated heart surgery are referred to out-of-State Centers.



PHOTO COURTESY BOZEMAN CHRONICLE

Physicians and the Nursing Consultant Participating in the Gallatin County Heart Sound Screening Program Watch as the Technician Gives Screening Test to Young Pupil.

The Pediatric Cardiologist at the Rheumatic Fever and Heart Diagnostic Center in Great Falls is Shown on the right, Studying a Patient's Record and Making Recommendations to the Patient's Private Physician. This Center Provided Diagnostic and Consultative Services to the Physicians in All Parts of the State.



Children's Division — Great Falls July 1, 1966 - June 30, 1968							
DIAGNOSIS							
	Rhenmatic Fever		Rheumatic Valvular Heart Disease	Congenital Heart Disease	No Heart Disease Innocent Murmur	Other Heart Disease	Other Disease
	Active	Inactive					
July 1, 1966 through June 30, 1967	3	7	23	203	136	6	1
July 1, 1967 through June 30, 1968	-	7	27	194	88	2	4
TOTAL	3	14	50	397	224	8	5

There were 701 patients evaluated who came from 124 towns and 46 counties and two patients from out of the State were evaluated. There were 85 patients referred to University Centers by the Montana Center. Thirty-seven of these heart patients had heart surgery, 30 were deferred or declared inoperable and 18 decisions are still pending.

When it is necessary to refer patients to University Centers the Heart Center acts like the out-patient department of the larger centers by determining when the optimum time for extensive evaluation and surgical correction will be and by making the referral. For those under 21, families eligible may receive part or all of the cost under the Crippled Children's Program. During the biennium 73 families received help under this program.

ADULT DIVISION — Missoula November 1966 to June 30, 1968	
Number of Patients Seen	96
Number of Patient Visits	117
Patients Referred out-of-State	20
Evaluation and Study Only	5
Evaluation and Catheterization	3
Surgery	12
Included in the services administered at the Missoula Center were:	
Electrocardiograms	112
Phonocardiograms	12
Exercise Capacity Tests	14
X-rays	117
Laboratory Tests	423
Among the patients seen there was a wide variety of conditions—28, with mitral conditions the most frequent.	

Problems of Alcohol and Alcoholism

The Chemistry Laboratory staff analyzes blood and urine specimens for alcohol content which are submitted by local law enforcement agencies and the State Highway Patrol. Each year there are approximately 500 specimens processed and frequently the staff is called upon to testify in court cases in which alcohol is a point in controversy.

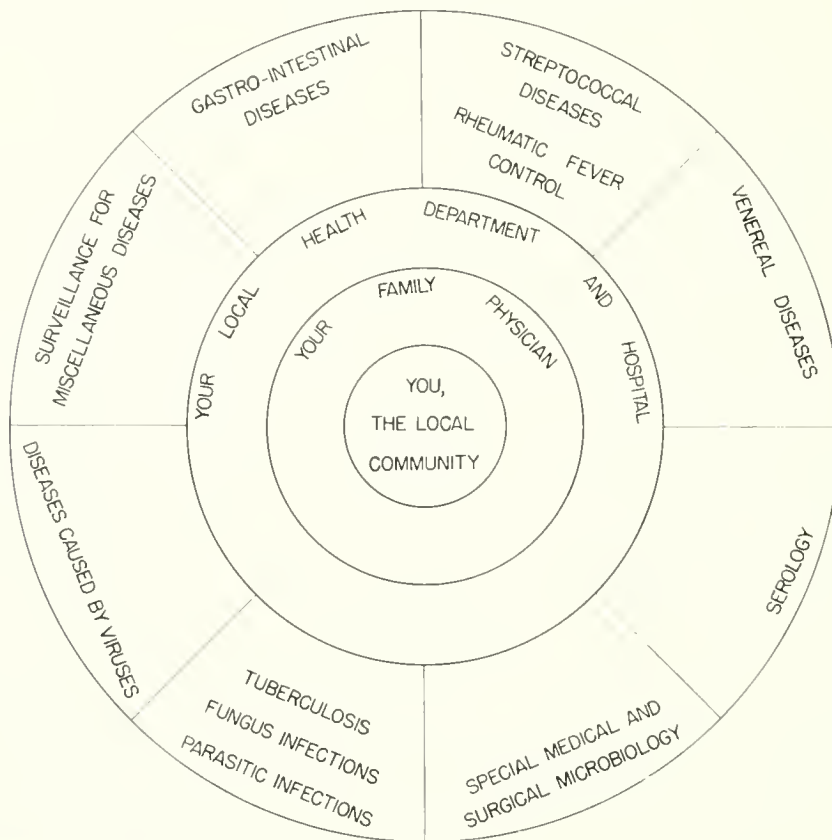
Health Education consultation has continued to the Helena Alcoholism Council and Teenage Councils concerned about the misuse of alcohol. There was participation in the Conference on Alcoholism sponsored by the Montana Council on Alcoholism and Carroll College in the winter of 1967.

COMMUNICABLE DISEASE CONTROL

In 1967 a staff task force was appointed to study the Communicable Disease Problems in Montana and to make recommendations to the Department for attacking these problems. The challenge given the task force members was to see if they could come up with innovations which hopefully would make it possible to more effectively carry out the control of communicable diseases in this State. It is expected that this task force report will be available early in the next biennium and its recommendations will be implemented as feasible.

The Communicable Disease Control Program is dependent on the services of the Microbiology Laboratory as shown in the accompanying chart.

MICROBIOLOGICAL LABORATORY SERVICES TO AID IN THE
PREVENTION AND CONTROL OF INFECTIOUS DISEASES



Vaccination Program

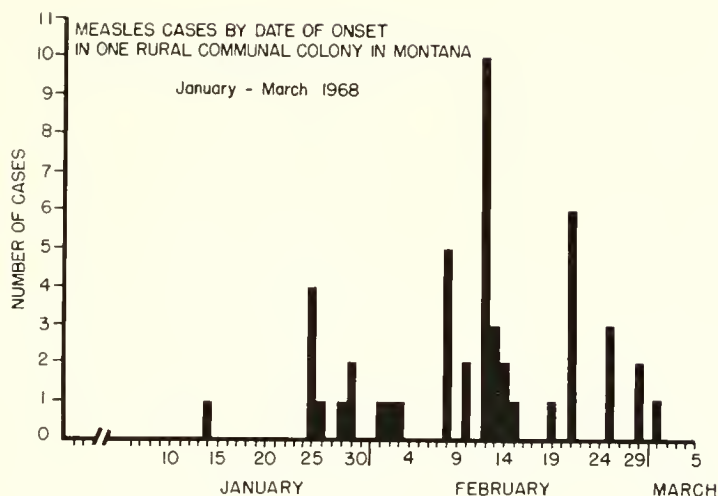
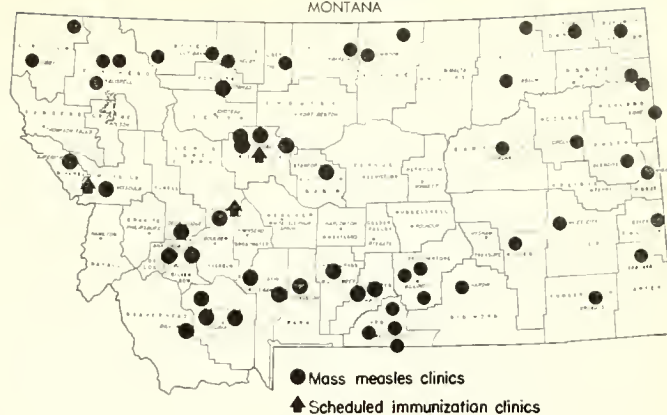
Montana's Vaccination Program is paying off. During this biennium **polio** and **smallpox** continued to be non-existent; **diphtheria** was decreased in 1967 by 87% and **measles** in 1967 was down 87% over 1966. However, in 1966 there were 18 cases of diphtheria on one of the Indian Reservations, in 1967 there were 11 cases, all on Indian Reservations. The State Department of Health staff provided assistance to the Public Health Service—Division of Indian Health in controlling this epidemic. The Public Health Service has jurisdiction on the Reservations for health matters.

Measles vaccine became available in February, 1966. There have been 58 mass measles immunization clinics held since October of 1966, at which a total of more than 33,000 children have been immunized. Also, nearly 3,000 doses of measles vaccine have been distributed to private physicians since January 1967.

A spectacular example of the value of measles vaccination is found in the measles epidemic that occurred in a rural communal colony in Montana during January, February and March, 1968. There are 85 persons in the colony, 51 of whom are 20 years of age or under. Of this figure, 48 contracted measles. The remaining children had received vaccine either prior to or at the onset of the epidemic.

In this epidemic there were 48 cases of measles, all occurring in persons aged 20 years or younger. The chart below shows measles cases by date of onset.

MASS MEASLES CLINICS
JUNE 30, 1968
MONTANA



The index case was a 9-year-old boy who had visited in another colony where he had been exposed to measles. The boy developed measles on January 14 which was 11 days after his return home. The first wave of 11 cases occurred among his primary contacts 10 to 20 days later. On February 8, a second wave of 23 cases spread measles throughout the colony. With the remaining cases scattered throughout the period, an analysis of the cases by age shows a 94% attack rate for the persons in this age group.

There were three children, one-year-old or less, who received measles vaccine before the second epidemic wave, who did not develop measles.

It is of particular interest that 18 cases, or 38%, occurred in the 14-20 year age group. The last known measles outbreak in this colony occurred prior to 1947 before the colony moved to Montana.

German Measles, rubella, decreased 46.8% and with the exception of the availability of a vaccine against this disease the prospects for a further reduction in the next biennium are bright.

Mumps vaccine has been licensed and is available for certain priority groups in the offices of the practicing physicians.

Pertussis (Whooping Cough) is the one disease for which there is protection by immunization which has not decreased, in fact, there was a 76.9% increase in the reported cases. Immunization is recommended for all children under six years of age and efforts are needed to protect more young children.

Enteric (intestinal) diseases, usually spread as a result of poor sanitation and poor personal hygiene practices, were of some concern during the biennium. An outbreak of *Salmonella* occurred in Billings and spread across the south-central part of the State to Missoula. With the help of an epidemiological team from the PHS Communicable Disease Center in Atlanta, the cause of spread across the State was traced to contaminated bread distributed through a grocery chain.

There were 73 cases of **Infectious Hepatitis** reported in 1967 and as of June 30, 1968 there were 156 cases reported in the 1968 year.

There were 102 cases of **trachoma** reported in 1966 and 145 in 1967 on an Indian Reservation. The spread of this disease was traced by the Division of Indian Health with the assistance from the SDH to the unsanitary handling of passing eye make-up from one person to another.

In 1968 there have been six cases of **malaria** reported in Montana. These cases are service men returning from Vietnam.

For the first time in two years **influenza** virus was present in Montana and an epidemic occurred throughout the State in January 1968. Six strains of the virus were recovered in the virus laboratory and they were identified as Asian influenza.

Encephalitis virus (sleeping sickness) is known to have been present in the last three years. In 1965 there were 330 known cases in horses and 18 in man; in 1966, 40 cases were reported in horses and in 1967 there were 60 known horse cases. Each year the virus has been recovered from mosquitoes but in the last two years infection in man has not been detected.

The behavior of encephalitis causes problems in controlling this disease. Certain infectious agents are continually "cycling" in nature and man may become infected by heavy exposure to one of the elements in the cycle. In encephalitis the normal cycle is mosquito-bird-mosquito, but horses or man may develop sleeping sickness if they are bitten by hordes of infected mosquitoes. Although there may be few cases in man or none at all, surveillance must be maintained for positive identification and control of this disease.

Asceptic meningitis. During the encephalitis season in 1967 (July 15-September 15) there were human illnesses resembling sleeping sickness but in reality they were cases of asceptic meningitis. Two strains of Cocksackie virus, Group 5, Type 5, were recovered from them. This proved to be part of nationwide occurrence of illnesses caused by this virus.

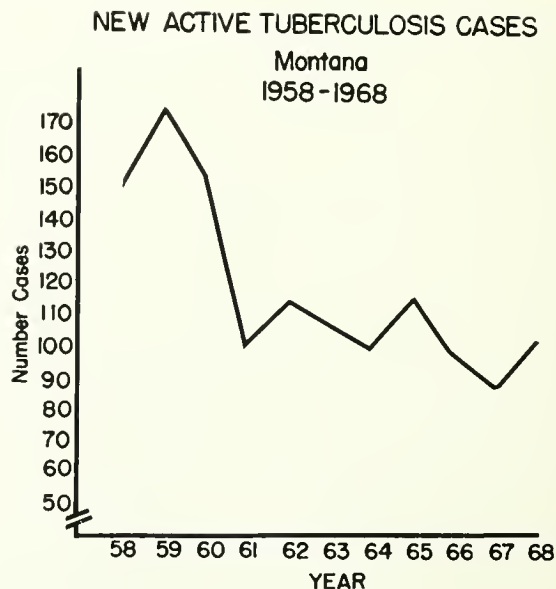
Other disease agents in insects occasionally "spill over" into man in Montana. Examples of some of them are **tularemia**, **Rocky Mountain spotted fever**, **Q fever**, and **Colorado Tick fever**.

In terms of numbers of human cases of viral disease specifically identified, this work is very expensive. However, the capability for some surveillance of viral, rickettsial, chlamydial, and mycoplasma disease among the people of the State must be maintained.

The SDH is one of the cooperating State Agencies in a **Rabies Control Program**. The SDH concern is the protection of the people particularly in eastern Montana, in the Counties bordering on the North Dakota border. Rabies is prevalent among the wild life in this area and efforts are made to prevent the spread of this disease in Montana. The SDH has provided rabies vaccine in several suspect cases of human rabies during the biennium.

Tuberculosis Control

The Goal of the SDH Tuberculosis Control Program is the Eradication of Tuberculosis. The Increasing Number of Cases of Tuberculosis, as Noted on the Right, Reflects Increased Interest and Better Reporting of this Disease. A Number of Steps have been Taken Toward Reaching the Eradication Goals, One of Which is the Assignment of a Physician and Several Nurses Working Full-time in Tuberculosis Control.



Another phase of the Tuberculosis Control Program is the Establishment of Tuberculosis Clinics. The First of these Clinics was Opened in April 1968 in Great Falls. Other Clinics are Planned for Billings, Butte and Missoula.

The Purpose of the Clinics is to: (1) Provide Follow-up Services on Active Cases and Insure Continuity of Therapy for Each Patient; (2) Evaluate Patients Suspected of Having Tuberculosis; and (3) Examine the Contacts of Patients who Have Active Tuberculosis.

The Public Health Nurse at the Great Falls Tuberculosis Clinic is Shown Instructing a Patient in the Use of the Nebulizer to Collect Sputum.



A Series of Two-day Workshops for Nurses to Update them on the Newer Concepts in the Management and Treatment of Tuberculosis was Held in Four Areas of the State in the Spring of 1968. Attending the Workshops were 147 Nurses from Hospitals and Nursing Homes, Public Health and other Community Agencies, Nurse Educators and Nurses from the State Hospital at Galen.

Attention was Focused on the Patient and His or Her Needs: Physical, Social and Emotional and the Applied Nursing Skills Required. Case-finding, Contact Identification and Management of the Suspect were Emphasized. One Session was Devoted to Practice in Giving Tuberculin Skin Tests which is Illustrated in the Picture on the left.

The SDH Staff is Cooperating in Tuberculosis Control in the State Institutions and is Assisting in the Initiation of an On-going Program at One of the State Institutions.

In January 1968 Improved Facilities were Inaugurated in the SDH Microbiology Laboratory. This Will Insure Maximum Safety of Personnel Working with the Tuberculosis Specimens, Increase the Reliability of the Tests and Reduce the Time for Reporting Test Results to Physicians. During 1967 there were 2,349 Specimens for Tuberculosis Processed and 116 or 5% of them were Positive. There seems to be an Increased Risk of Tuberculosis Among Residents of Indian Reservations and 40% of the Specimens came from this Source.



Venereal Disease Control

Because of the increase in reported gonorrhea, a pilot follow-up program was initiated near the end of the biennium. Extensive epidemiologic measures are being taken to locate and bring to examination and treatment the females who constitute most of the gonorrhea reservoir.

Three field representatives from the SDH staff, as well as nursing personnel are actively engaged in interviewing persons suspected of having venereal disease.

The health education aspect of the Venereal Disease Control Program is making some impact in both adult and school-age groups. However, a survey was made during the last few weeks of the biennium to determine the status of venereal disease education in Montana public and parochial junior and senior high schools. Administrators and teachers in each of 43 schools were chosen in the sample interviewed. These 43 schools represent 20% of the junior and senior high schools in the State and 23.4% of the students.

The administrators and teachers were asked what on-going or planned educational activities relating to venereal disease are included in the curriculum in their schools.

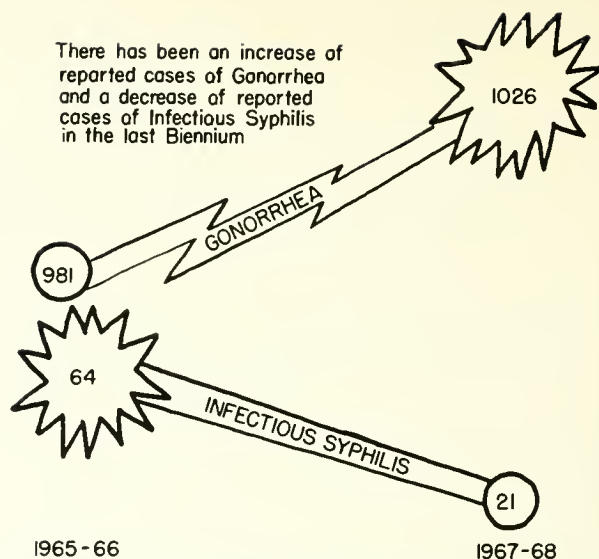
In answer to these questions it was found that the programs range from those which are complete and meaningful to those where "nothing is being done now nor contemplated." A preliminary review of the survey results shows that many schools having well planned programs have venereal disease education integrated in several areas of the instruction program. Venereal disease education may be included in biology, health education, social sciences, family life education and others.

Other schools have a limited program consisting of a film showing or a lecture by a physician or nurse, generally carried on in school assembly programs. Some schools have no "official" program or policy, and leave such instruction to the individual teacher's discretion.

Several reasons were given by the personnel in the schools where there is no program nor plans for such a program. Among these reasons were: lack of interest or trained faculty, fear of parent objection, community reluctance or indifference. In a few instances fear of disturbing the "status quo" by introducing such a subject seemed to be the major reason.

The negative attitude of the school's administration and the community leaders appears to be the major reason venereal disease education is not included in the curriculum.

When the survey results have been finalized it is anticipated the areas of greatest need will be pinpointed and steps will be taken by the SDH staff to aid in meeting these needs.



Making a Contribution to Venereal Disease Prevention are In-Service Training Sessions for Teachers to Aid Them in Improving Communicable Disease Education in the Schools.



Safety Education

The staff Accident Prevention Committee appointed in 1956 became a staff "Task Force" in 1968 and was given the responsibility for making recommendations aimed toward the reduction of unnecessary death and disability caused by accidents.

This Task Force recommended that a Safety Education Program be established with specific staff assigned to carry it out. This recommendation was accepted and the program was initiated in July 1968.

The recommendation was made, based on the findings of the Task Force study which confirmed the cause for alarm, since accidental deaths in Montana in 1966 were high. In the 1-4 and 5-14 year age groups, accidental deaths, not including motor vehicles, rank first as the leading cause of death; second in the 15-24 and 25-34 age group; third in the 45-54 age group; fourth in the 35-44 age group; fifth in the 55-64 age group and seventh in the 65 and over age group.

Furthermore the 1965 accident mortality rates for most causes were higher in Montana than in the rest of the United States. The 1965 year was used for comparison since it was the most recent year for which national rates were available. Some of the comparisons in selected causes of accidental deaths are shown on the accompanying graphs; rates per 100,000 population are used. It will be noted that the only cause of death where the Montana rate does not exceed the national rate is in home accidents where it is slightly lower.

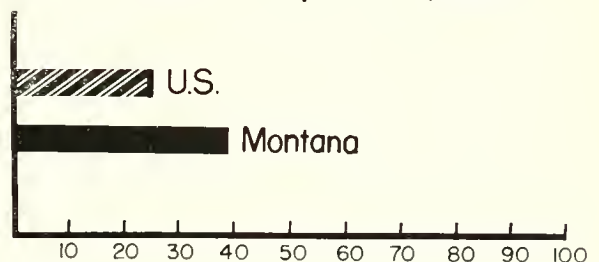


Among the many Hazards to Curious Children Found in and around the Home are Unguarded Appliances. Injury to the Child in this Photo could be Prevented by Putting the Iron and Ironing Board away when not in Use. Prevention is the Key to Reducing Accidental Death in the 1-4 Age Group—the Leading Cause of Death in this Age Group.

MOTOR VEHICLE ACCIDENTS

1965

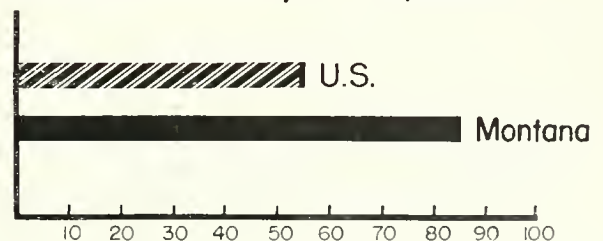
Death Rate Per 100,000 Population



TOTAL ACCIDENTS

1965

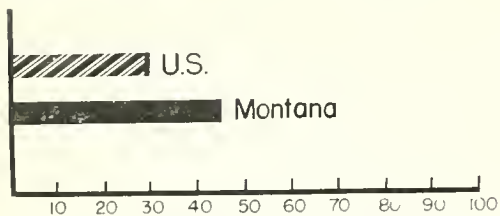
Death Rate Per 100,000 Population



ACCIDENTS, OTHER THAN MOTOR VEHICLE

1965

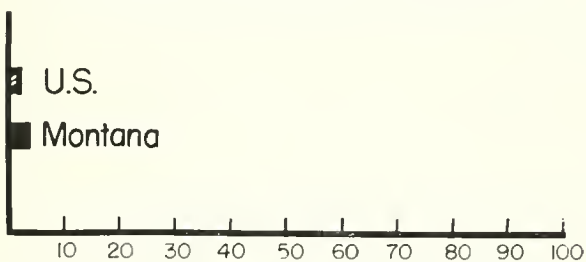
Death Rate Per 100,000 Population



FIREARM ACCIDENTS

1965

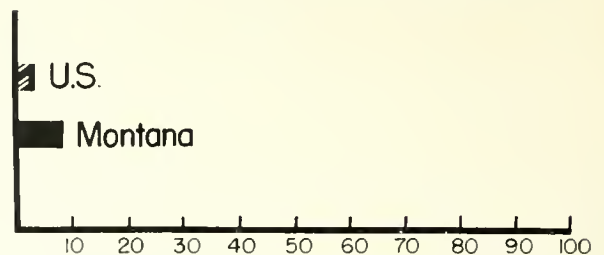
Death Rate Per 100,000 Population



DROWNING ACCIDENTS

1965

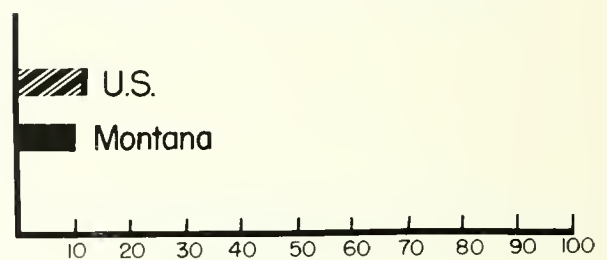
Death Rate Per 100,000 Population



HOME ACCIDENTS

1965

Death Rate Per 100,000 Population



Emergency Medical Services

During the two years in which the Emergency Medical Services Program has been in existence, efforts have been directed to ambulance and hospital emergency services. The needs for improvement have been found and the training of personnel has begun.

Five Training Courses for these two groups have been held and additional courses are planned. There were 218 persons from 25 communities who attended these courses which were held in Kalispell, Missoula, Helena, Livingston and Great Falls. Members of local Medical Societies were the instructors in these courses.

In the on-going program emphasis will continue to be placed on the training of personnel and in the development of improved equipment. Efforts will also be made to develop ambulance services where none are available at this time.



Modern, Well Equipped Ambulances Can Carry up to Four Stretcher Patients. This Operator is Checking the Installation of an Auxiliary Stretcher Unit,



Training Ambulance Attendants Includes the Proper Usage of Resuscitation Units Similar to that Shown Above. Other Equipment Necessary for Patient Care is Stored in the Vehicle Also.

Emergency Health Planning Program

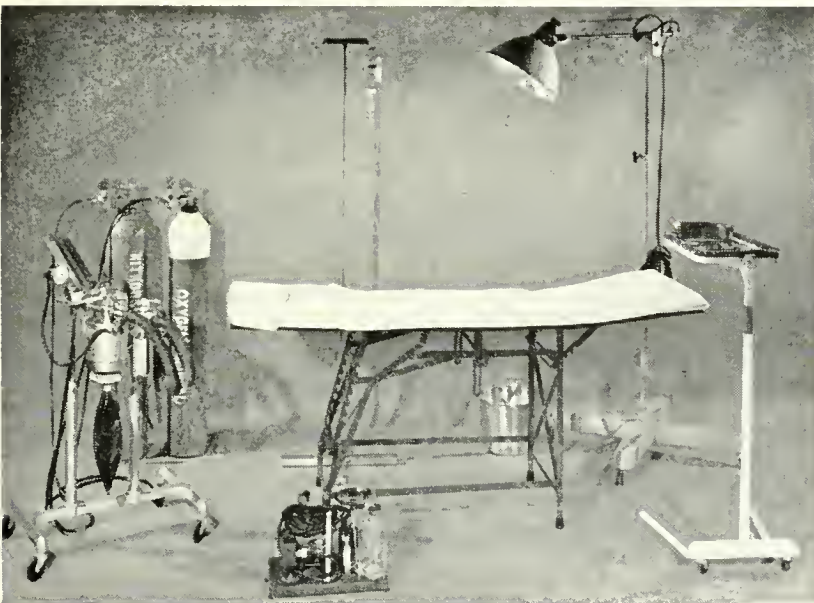
A part of the Emergency Health Planning Program is the placement of "Packaged Disaster Hospitals" and "Hospital Reserve Disaster Inventory Supplies" in strategic locations in the State.

A "Packaged Disaster Hospital" is a complete 200-bed hospital, with necessary pharmaceuticals and surgical supplies, capable of operating for thirty days in time of disaster. A "Hospital Reserve Disaster Inventory" unit is a thirty-day supply of critical pharmaceuticals and surgical supplies in increments of 50, 100 and 220 bed modules.

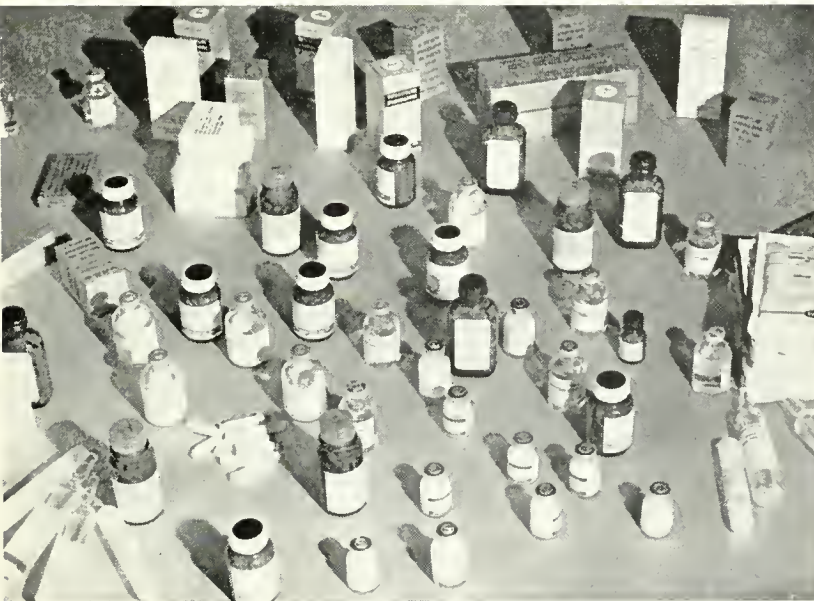
To be eligible to participate in either of these programs, a hospital must rotate a portion of the perishable items, develop a utilization plan and, in the case of a Packaged Disaster Hospital, provide a staff for its use.

The staff assists local communities in developing community-wide disaster plans, finding adequate storage for the hospital and providing training to the professional and auxiliary staffs. An inspection program has been developed to verify that the perishable items are being rotated.

The administration of the "Medical Self-Help" program is a responsibility of the Emergency Health Planning program also. This is a sixteen-hour course designed to teach laymen what to do in a disaster situation if a physician will not be available for a long period of time. Montana has trained approximately 41,000 persons since the inception of the program in 1962.



One of Five Operating Suites Contained in the Newer Model of the Packaged Disaster Hospitals is Shown at left. Below is a Representative Portion of the Pharmaceuticals Contained in Each Packaged Disaster Hospital. Contracts Have Been Signed for Both the Packaged Disaster Hospitals and the Hospital Reserve Disaster Inventory Programs by St. Vincent's Hospital in Billings, the Montana Deaconess Hospital in Great Falls and the Kalispell General Hospital. Contracts have Been Signed for the Hospital Reserve Disaster Inventory Program by the Deaconess Hospital in Billings, the Holy Rosary Hospital in Miles City, the Warm Springs State Hospital and the Cascade County Community Hospital in Great Falls. There are 15 Additional Hospitals Presently Considering their Participation in One or Both of These Programs.



PART V. IMPROVING FAMILY HEALTH

CRIPPLED CHILDREN'S SERVICES

Crippled Children's Services are provided for children under 21 years of age. The services include casefinding, diagnosis and treatment. The conditions which are accepted are those amenable to treatment. These include orthopedic and neurological conditions—either congenital or acquired; congenital heart disease, neoplasms and rheumatic fever.

There is no fee charged for diagnosis which can be obtained in Crippled Children's Clinics or in the offices of the program physicians. In the early years of the program, clinics were held in as many as 15 centers in the State. Now that specialized medical personnel and facilities are available in many parts of the State, only seven clinics were held in 1966 and three in 1967. In 1966 and 1967 there were 763 children seen at clinics.

Financial assistance for treatment is provided when families meet certain eligibility conditions. Since July 1, 1966 the SDH has paid 100% of the Montana Medical Association's fee schedule. Prior to that 80% was paid and earlier 55%.

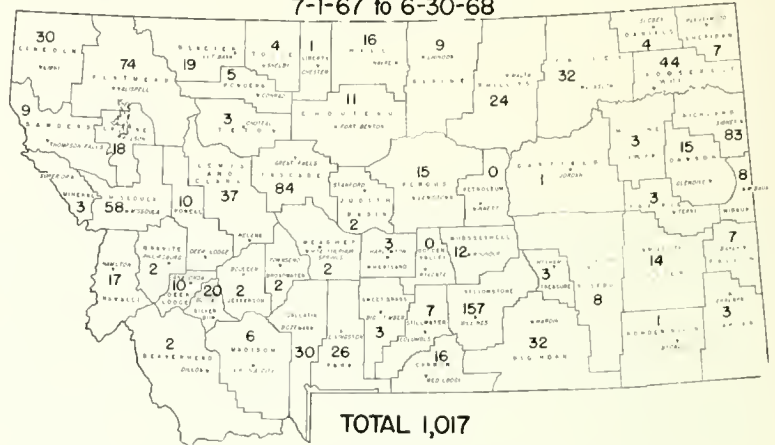
The rate of payment to hospitals has been changed during the biennium to "reasonable cost" instead of the "per diem" rate. This is due to the requirement of Medicaid.

Specialized services for children are provided at the Center for Handicapped Children in Billings, by the Cleft Palate Teams and at the Rheumatic Fever and Heart Diagnostic Center in Great Falls. The services of the Rheumatic Fever and Heart Diagnostic Center are explained in Section IV of this report. During the biennium there were 73 children sent out-of-state for heart surgery which is not performed in Montana.

The **Center for Handicapped Children** is sponsored by the SDH, the Billings School District #2 and Eastern Montana College.

The Center provides diagnostic and evaluation services for children with physical and medical handicapping conditions from all areas of the State. For children from the Eastern part of the State, speech and hearing services are provided and a clinic for mentally retarded children under five years of age is also provided.

NUMBER OF CHILDREN RECEIVING PHYSICIANS' SERVICES
UNDER THE MONTANA CRIPPLED CHILDRENS' PROGRAM
7-1-67 to 6-30-68



The Center's services are provided by a team of medical and para-medical staff. Included is medical care, physical and occupational therapy, and play or psychotherapy are available. Special education in the academic school program is also a part of the Center's Services. The accompanying charts show the services provided at the Center between July 1, 1966 and June 30, 1968.

**KINDS OF SERVICE PROVIDED WITH NUMBERS
OF CHILDREN RECEIVING EACH AT THE
MONTANA CENTER FOR HANDICAPPED
CHILDREN**

July 1, 1966 - June 30, 1968

**CASE EVALUATIONS BY DISORDER AT
MONTANA CENTER FOR HANDICAPPED
CHILDREN**

July 1, 1966 - June 30, 1968

	1966-68	Since 1947	Disorder	No. Evaluations
Diagnosis & Evaluation Clinics:				
Medical	45		Cerebral Palsy	177
Mental Retardation	20		Other orthopedic problems including	
Cleft Palate	12	77	spina bifida, muscular dystrophy,	
		482	amyotonia congenita, etc.	27
Children Seen for Initial Evaluation:			Miscellaneous, including retarded,	
Medical Clinic	66		epileptics, post encephalitis, etc.	93
Mental Retardation Clinic	38		Hearing Problems	191
Cleft Palate Clinic	21	125	Cleft Lip and Palate	
		854	(Cleft Palate Clinic)	101
Children Seen for Re-evaluation:			(Speech evaluation diagnosis)	97
Medical Clinic	201		Other Speech and/or language handicaps:	
Mental Retardation Clinic	22		(Speech diagnosis)	365
Cleft Palate Clinic	75	298	(Deferred)	70
		2735		
Children Attending Full Time School:	51	51		
(Summer Session not included)		370		
Children Released for Other Placement:	17	167		
Children Receiving Psychological Testing:	382	1817		
(Evaluations and Re-evaluations)				
Individual Children at Medical Clinics and/or for Speech and Hearing Problems:	745			

During the biennium the number of patients seen at the clinics were as follows:

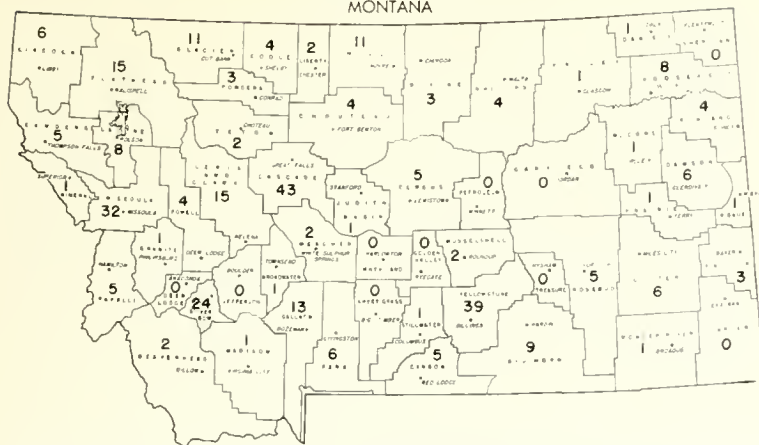
Medical Clinic	267
Speech and Hearing Clinic	270
Cleft Palate Clinic	96
Mental Retardation Evaluation Clinic	60

There were 23 Special Education Teachers and 80 Nurses and Therapists who received some special training at the Center.

CLEFT PALATE PROGRAM—ACTIVE CASES

June 30, 1968

MONTANA



During the 1967 and 1968 calendar years the following children were born with a cleft handicap:

	1967	1968 to June 30
Number born	23	10
Number deceased	2	0
Number registered in State Program	19*	9
Private care	1	0
Air Force care	1	1

*One of the children registered died.

As of June 30, 1968 there were 328 Children Receiving Care in the Cleft Lip-Cleft Palate Program.

During the twelve years the program has been in operation, up to June 1, 1968, the following shows the disposition of cases:

Active cases	328	No further care desired	13*
Moved out of State	122*	Uncooperative	6
Maximum correction	76	Died	24
Private care	11	Institutionalized	28
Unable to locate	9	Dropped because reaching age 21	28

*Many of the cases who "moved and those desiring no further care" had almost reached maximum correction.

The following services were paid for by the Program during the last biennium:

	1966-67	1967-68		1966-67	1967-68
Surgery	61	69	Anesthesia	58	38
Orthodontics	133	120	Speech Therapy	2	2
Prosthetics	10	13	Dentistry	18	15
Hospital Care	59	61	Pediatrics	46	52

THE HEARING CONSERVATION PROGRAM

Hearing Loss Can Be Detected in Infants as Young as One Month of Age. When the Infant's Hearing is Normal He or She Reacts to Sounds.

On January 1, 1965 Hearing Conservation services for adults were added to the on-going program which provided services for children, and during the biennium services for infants have been included also. The purpose of the program is to prevent "hearing" problems from developing in so far as possible and to reduce the handicaps developed because of hearing loss, if possible. This is accomplished through prevention and education, casefinding, referral and/or treatment and rehabilitation.

An Advisory Committee provides assistance to the staff working on this program. Community programs are developed by a multidiscipline team from the SDH with professional health personnel, teachers and citizens groups in the local areas.

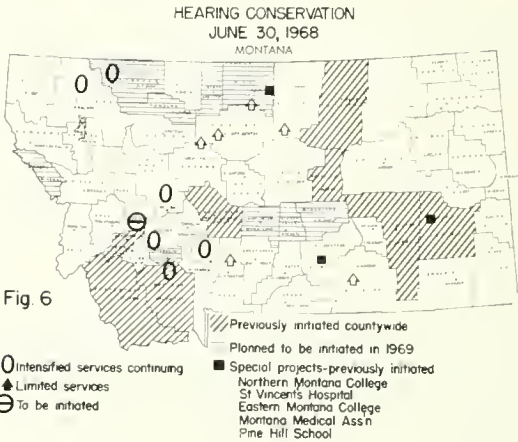


Community Volunteers are Taught to Administer Hearing Screening Tests.

The SDH Audiologist Administers the Threshold Tests for Individuals Whose Screening Test Indicates a Suspected Loss.



CHILDREN'S SERVICES NON-CLINICAL	
8-1-64 - 6-30-68	
By Type of Service	
Screened	18,862
Rescreened	3,865
Field Threshold	1,823
Referral	461
Total	25,011
By Calendar Year	
1964	1,874
1965	778
1966	4,685
1967	6,602
1968 (Through 6-30)	4,923
Total	18,862
By Total Service Contacts	
1964	2,835
1965	922
1966	6,409
1967	8,941
1968 (Through 6-30)	5,904
Total	25,011



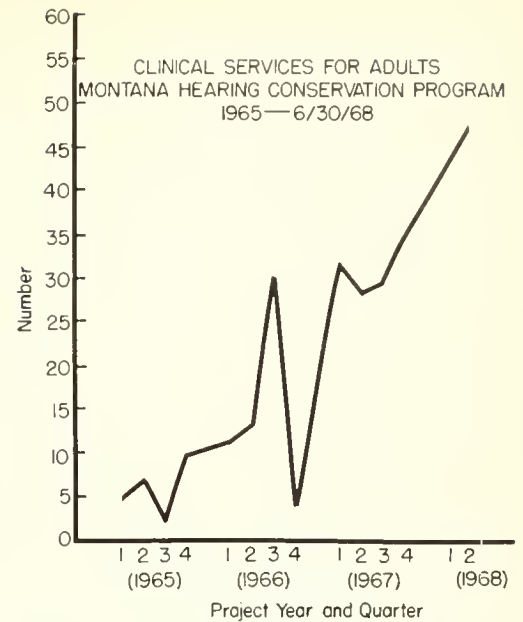
CHILDREN'S SERVICES CLINICAL	
8-1-64 - 6-30-68	
Clinical Services	746
Draft Rejectees Included Above	15
Referral for Hearing Aid Service	120

Since the initiation of the adult part of the program there have been 3,422 who have been given the screening test; 890 field threshold tests and 243 referred.

The type of services provided ranged from simple clinical hearing tests to hearing aid evaluations, fitting, counseling, and follow-up care and advice.



Fitting New Hearing Aids and Evaluating the Results of Hearing Aids Being Worn is One of the Services of the SDH Hearing Conservation Program.



PRESCHOOL VISION SCREENING

The purpose of the Pre-School Vision Screening Program is to find suspected cases of Amblyopia Ex Anopsia or "Lazy Eye" before the child is four years of age.

Children with "lazy eyes" have not learned to blend the double vision which they see with each eye into one, and because they cannot tolerate "double vision" they learn to see with just one eye. The eye which is not used loses its ability to see and hence loses the protection afforded should the vision be lost in the seeing-eye by accident or some other misfortune.

If the child is seen by an eye specialist at an early age this condition can usually be corrected.



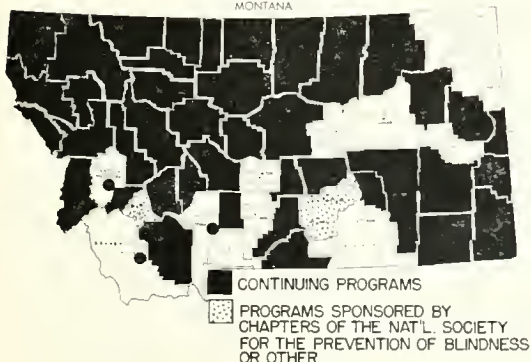
During the July 1, 1966 to June 30, 1968 Period, There were 1,304 Volunteers Who Conducted Vision Screening Tests on 7,757 Pre-School Children. Of This Number 839 were Rescreened and 353 referred for Examination by an Eye Specialist.

These Programs were Conducted in 45 Counties under the Sponsorship of the SDH Staff. A Few Other Counties Conducted Programs Without the Assistance of the State Department of Health Staff. The Areas Where this Program has been Initiated Are Shown on the Map Below.

MENTAL HEALTH

The project "Family Health Services for the Mentally Ill and Their Families" ended during the 1964-1966 biennium. Since then, one mental health nursing consultant has continued to give as much assistance as possible to local public health nurses providing services to mental patients released from the State Hospital. She also continues her liaison responsibility with this Hospital. Orientation periods of one-week duration are provided annually by the hospital for new public health nursing staff members.

PRE-SCHOOL VISION SCREENING
JUNE 30, 1968
MONTANA



HEALTH REFERRAL SERVICE FOR ARMED FORCES MEDICAL REJECTEES

The Armed Forces Examining Station in Butte rejected nearly 2,000 young Montana men and women during the 1967 fiscal year. This was 27% of the total number examined.

The Health Referral Service aids these young people by providing counseling and, when needed, refers them to State and local agencies and professional persons in private practice who provide health services. Responding to the needs of these persons have been the Division of Vocational Rehabilitation, Services for the Blind in the State Department of Public Welfare,

Public Health Nurses, SDH Nutritionists, practicing physicians, business men and more than 25 others.

In Kalispell an advisory committee has been organized to provide counseling and referral services to the young people living in this area who desire help. The members of this committee are people who are taking a personal interest in the individual rejectees. They are also making the many physical and mental health problems that exist in the community known to the citizens in that area.

By interviewing the rejectees at the Butte Examining Station, the staff in the SDH program makes certain that each individual understands his problem and its consequences if not treated. He or she is advised on the steps needed to alleviate the condition. About 30% of these rejectees ask for help immediately and steps are taken to provide this assistance. The other 70% include those who are already under care, or who have permanent disabilities that do not require further care and some who do not want any help.

The leading causes for medical rejection are hearing and vision problems, obesity, knee abnormalities, ulcers, respiratory problems, skin conditions, hernias, psychiatric problems and illiteracy.

The goal of the program is to help the rejectees help themselves to become productive and healthy citizens. To reach this goal there are some vital unmet needs in Montana. Among them are:

- more vocational schools
- a greater awareness of health problems early in the life of children and efforts made to get these children under care
- increased availability of professional health persons such as physicians, public health nurses and others, particularly in the more isolated areas of the State or provision made to get those in need of services to areas where the necessary care is available
- more programs such as Manpower Development Training Act and On the Job Training. These programs are needed to provide for those persons not eligible for Vocational Rehabilitation, and do not have the financial ability to pay for the training they so urgently need.

MENTAL RETARDATION

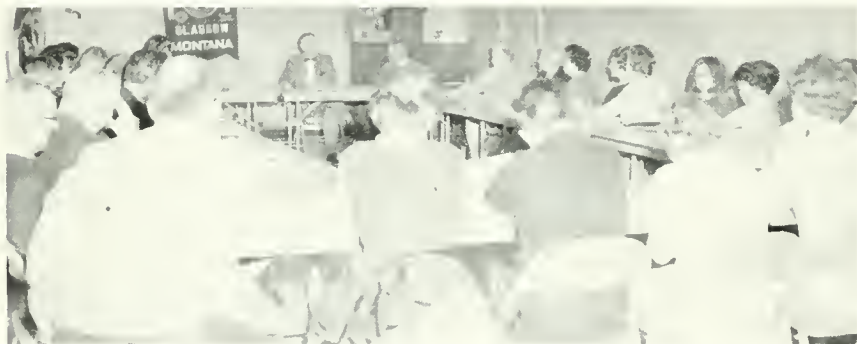
Activities in Mental Retardation have been geared to the implementation of recommendations made by those participating in the Mental Retardation Planning Project. These recommendations came about during and following the attention given to the problems of the mentally retarded in each of the State's 56 Counties and by a State Advisory Committee.

The State Interagency Council, appointed by the Governor near the close of the last biennium, has continued to be active. It has representation from the Departments of: Health, Institutions, Public Instruction, and Welfare; the Montana University System; the Employment Service, and the Division of Vocational Rehabilitation. Two members of the Montana Medical Association and two members of the Montana Association for Retarded Children and Adults have been added as advisors to the Council. The purpose of the Council is to provide for combined and coordinated efforts on the part of these State agencies on a continuing basis for the benefit of the mentally retarded children and adults in this State.

Workshops on Recreation and Physical Fitness for the Retarded were Held at Missoula, Billings, Bozeman and Havre in Cooperation with the Colleges and Universities. They Have Resulted in the Development of Several Programs in Local Areas.



Approximately 30% of the 2,000 Young Men and Women Rejected for Medical Reasons by the Armed Forces Examining Station in Butte Request Assistance in Getting the Needed Care. This Assistance is Provided Through a State Department of Health Program.



With the Assistance of the SDH Staff, Two Meetings Were Held in Each of the State's Thirteen Districts Organized for Mental Retardation Planning and Implementation.



Techniques in Adapting Educational Methods for Success with the Retarded Place Emphasis on Beginning with Familiar Objects. Shown at Left is the Out-of-State Resource Person Demonstrating the Use of the Common Everyday Wash Cloth When Introducing a Retarded Child to Swimming Instruction at One of the Workshops on Recreation and Physical Fitness for the Retarded. Following the Workshops Meetings with the Montana High School Association Have Resulted in the Special Education Students in Some High Schools Participating in High School Interscholastic Sports. This Has Kept Several Potential Drop-outs from Special Education Classes in School to Get More Training, Especially in the Work-study Program.

An Information and Referral Center has been Established in Great Falls to Serve 16 Counties in Northern and Central Montana, Including Cascade County. Shown at Right is the Staff, Consisting of a Medical Director, Administrator, a Public Health Nurse, a Social Worker and a Clerk.

The Purpose of the Center is to Make Known the Sources of Help for Handicapped Children. Such Information is Available to Parents, Professional Workers and Others Interested in Aiding the Handicapped.



At the Missoula Growth and Development Center Complete Diagnostic Services are Available for Suspected Cases of Mental Retardation. The Center is Available to Accept Referrals from Anywhere in the State; However, Most of the Individuals Seen are Residents of Western Montana. Weekly Clinics are Held at the Center in Missoula. In Addition, Screening Clinics are Held in Outlying Counties. Members of the Staff are Pictured Here in a Staffing Session Discussing Recommendations that Will Benefit Persons Seen at the Clinic. The Center is a Joint Venture of the State Department of Health, Missoula City-County Health Department, and the University of Montana. The Staff Includes a Part-time Medical Director, Two Public Health Nurses, Two Clinical Psychologists, Two Trainee Psychologists, a Social Worker, a Speech Pathologist, a Social Worker Trainee and a Secretary.



At This Center, Emphasis is Placed on Quality of Work Rather than Quantity. A Great Deal of Time is Spent on Follow-up Work with the Families of Persons Who Have Been Evaluated at the Clinic. The Two Public Health Nurses or the Public Health Nurse in the Community Make Contacts with the Families Before the Child or Adult Makes a First Visit to the Clinic and Regular Follow-up Visits are Made to the Homes as are Necessary After the Evaluations.



An Information Center was Established in Bozeman to Provide Information on Mental Retardation for the Citizens in Gallatin County. The Members of the District 11 Organization for Mental Retardation are shown at the left at the left visiting the Center.

All Counties Do Not Have a Paid Staff Member, but a Point of Referral or Information Center has Been Established in 50 Counties. The Remaining 6 Counties are in the Process of Establishing a Center.

The Number of Classrooms for Special Education Has Grown Rapidly. It is Interesting to Note the Increase in High School Classes Which are Reducing the Drop-out Rate. Work-experience Classes are Providing a Step Toward Employment of the Retarded.

New Legislation Permits the Establishment of Pre-School Classes and Reduces the Number to Four Students Required for the Organization of a Special Education Class for the School aged.



The ultimate goal of the services to the retarded is to assist each person reach his maximum potential. Many of them, if properly trained, are employable. The State Jaycees are carrying out a "Little Brother" project. In this project, each Jaycee sponsors a retarded person's finding employment and gives him support in his adjustment to his first job.

A workshop for employers was held to acquaint the employers of the retarded with the supervision required and the types of positions the retarded of varying abilities can usually assume.

Consultation has been provided the Sponsors of the Facility to be Constructed at Glendive. More information about this facility will be found in Section VII, page 41 of this report.

One of the causes of mental retardation is a condition known as **Phenylketonuria** (PKU). This condition can be detected by a laboratory test. The condition is caused by the body's inability to metabolize phenylalanine, one of the proteins found in many foods.

The test is carried out in the SDH laboratory on a specimen of the infant's blood. The 1965 legislature passed a law requiring hospitals to see that the test is made on each newborn. The blood must be taken 48 hours after the infant's first feeding—the test is not effective before that time.

Because so many infants are taken home from the hospital before this time has elapsed it is difficult to get blood specimens on all infants. To find the infants that are missed at the hospital, State and local public health nurses are carrying out follow-up procedures with excellent results.

The first two full years the testing program was in operation, the laboratory reported as follows:

Number of live births.....	24,383
Number screened for PKU	22,558
Percent infants tested	92.5
Number PKU cases detected	2

The laboratory uses the Guthrie test which on a universal basis shows a ratio of one case of PKU to 12,000 infants tested. Montana's ratio is one case to 11,279.

The treatment of the condition is a controlled diet which must be instituted before the infant is one month old. A specially prepared formula low in phenylalanine is available commercially. As the infant gets older this diet may be supplemented with foods having very little phenylalanine. This takes careful planning and the services of the SDH nutritionists are available, on physician request, to give this assistance to the mothers of these children. There must also be periodic laboratory tests run to ascertain that the diets are correct.

Hospital and Medical Facilities, Home Health Care Programs

The **Hospital and Medical Facilities Program** contributes materially in protecting family health; included are hospitals, and long-term care facilities. The long-term care facilities are nursing homes, personal care and boarding homes.

To attain the goals of properly built and properly functioning health facilities, the philosophies and activities of the three parts of the program are inter-related. They are: (1) **construction**, (2) **licensing**, and (3) **certifying for Medicare**.

Construction begins with proper planning. The Community and the sponsors of the facility must develop full and detailed medical needs information to insure that the community needs are properly met. Following this determination architectural drawings are made.

Plans for the facilities are then reviewed by the SDH Staff to assure that they will be located in suitable areas and properly designed. This is true of the facilities whether there is a Federal financial participation or not. They all must conform to pre-determined standards.

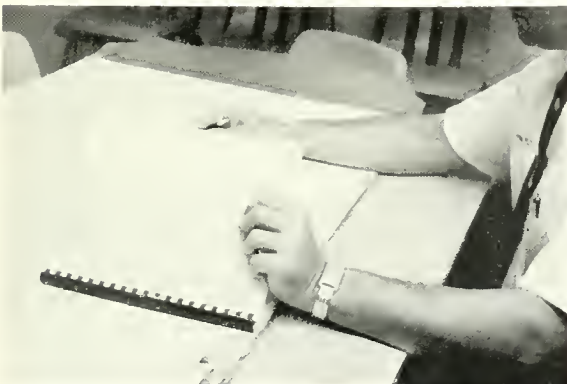
During 21 years of the Hospital and Medical Facilities Construction Program, 78 projects in 39 communities in Montana have been constructed utilizing Federal funds on a 40%-60% matching basis. Since 1965 Federal funds, on a 55%-45% matching basis, have been available for the construction of community oriented facilities for the mentally retarded and the mentally ill. This has allowed the construction of a non-ambulatory unit, and replacement of residential units for the retarded at Boulder River School and Hospital at Boulder and providing residential units at Glendive. Plans are underway for the remodeling of an existing building to provide a comprehensive community mental health center at Billings.



The Hospital and Medical Facilities Staff in the SDH Review Construction Plans, Using the Combined Knowledge and Experience of the Several Disciplines of These Professionals.

During this reporting period St. Peter's Hospital in Helena was completed. Nursing Homes utilizing Federal financial assistance (Hill-Burton) were completed at the Roundup Memorial Hospital, Roundup; Lutheran Home of the Good Shepherd, Havre, and St. Peter's Hospital, Helena. The Nursing Homes not utilizing Federal financial assistance that were completed are: Hillcrest, Bozeman; St. John's Lutheran, Billings; Yellowstone County, Billings; Parkside Manor, Helena, and Daniels Memorial Hospital, Scobey.

A complete financial summary of projects scheduled and under construction for this report period will be found in Part VII, page 59.



A New Manual, "Montana Law and Licensing Standards for Long-Term Care Facilities," was Developed During the Biennium. The New Standards Comply with the Conditions of Participation for Medicare as Well as Meeting the U. S. Public Health Standards for Nursing Home Construction.

The **licensing part of the Hospital and Medical Facilities Program** requires that both hospitals and long-term care facilities must be licensed annually. They are inspected and evaluated to be sure they meet the standards. If there is need for improvement in any area, the staff provides consultation and assistance.

The Standards are established commensurate with the level of service the facility offers. The standards for hospitals are obviously different from those of boarding homes and the standards for large general hospitals are different from the small community health facilities.

The nursing home, personal care home and boarding home standards vary in as much as the nursing home must furnish skilled nursing care, the personal care home provides intermediate nursing care and the boarding home provides room and board only.

In preparing the new Standards, special committees of the Montana Hospital Association and the Nursing Home Association offered comments and criticism which were taken into consideration when the final draft was developed. Consultation was obtained from the State Fire Marshal's office in the development of the fire regulations and with the Executive Secretary of the Montana Pharmaceutical Association in the development of drug standards.

To provide assistance to the more than 200 Health Facilities in Montana, Seminars and Workshops have been held for the staffs. In four Montana communities, two Seminars were held on Nursing Service Administration in Nursing Homes, Patient Assessment and Nursing Care Plans, Skill Development and Rehabilitative Techniques. This series is a part of a five-year plan. A short-term training seminar for Nursing Home Administrators and Nurses and a workshop to train Medical Record Clerks in Nursing Homes and Small Hospitals were held.

A Total of 55 in the Hospital Session and 77 in the Nursing Home Session were Registered in the Workshop for Medical Record Clerks. There were 30 Hospitals and 52 Nursing Homes Represented Which is 44% of the Hospitals and 78% of the Nursing Homes.

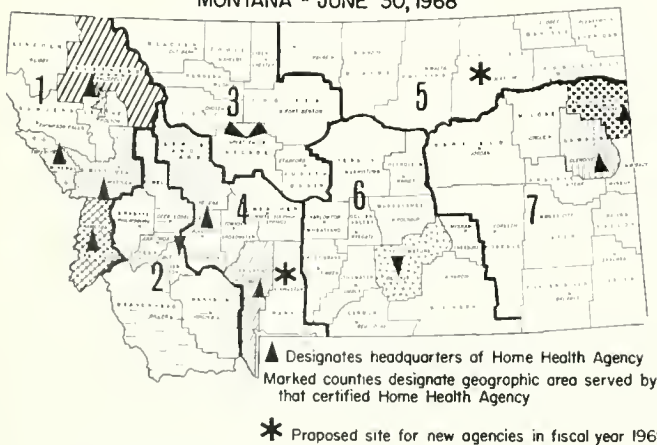


The concept of progressive patient care was not initiated by the **Medicare Program**, but Medicare did focus the attention of all health providers on them and it hereby acted as the stimulus to develop these concepts more rapidly and put them into action.

The SDH staff develops the health standards to be met by hospitals and long-term care facilities and the State Department of Public Welfare requires that these levels be met before they will authorize vendor payments for their Medical Assistance and Medicaid Programs. This contributes toward more efficiency and less duplication in these branches of State Government.

Home Health Care Agencies

HOME HEALTH CARE CERTIFIED AGENCIES
MONTANA - JUNE 30, 1968



Montana Home Health Care Agencies Provide Services to All Ages and to Patients Paying for Their Own Care as Well as Those Getting Medicare or Medicaid Assistance.

In the United States well over a million persons have received post-hospital care by Home Health Agencies which are certified by Medicare. Montana makes available this service which includes nursing and one other therapeutic service to 48% of the population.

Montana Home Health Care Agencies must be certified by the SDH Division of Nursing. The State staff provides consultation and supervision and assists communities to develop this service if it does not already exist.

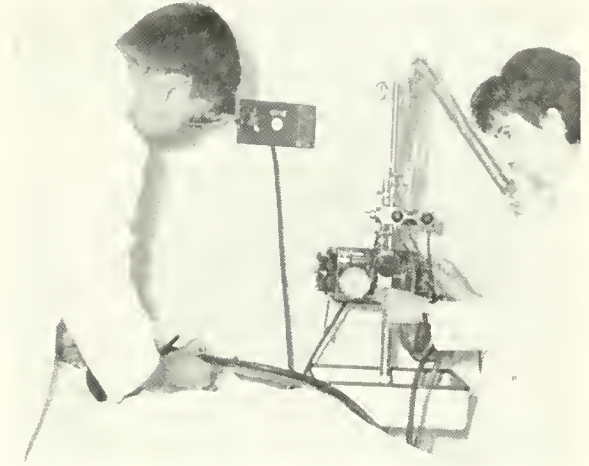


Photo Courtesy Bozeman Chronicle

Patient Progress and Varied Levels of Care

As the patient progresses from the level of acute illness to that of recovery his needs differ. In order to furnish the professional services he needs and still conserve the consumer health dollar, it has become evident that one facility furnishing highly technical and skilled service cannot furnish all levels of care.

The Hospital Furnishes Highly Technical and Skilled Services. This is Where the Acutely Ill Person is First Admitted. As He Progresses He is Moved to the Extended Care Wing of the Hospital.



When the Patient No Longer Needs the Care Provided in the Hospital, He Next Goes to the Skilled Nursing Home.

Following the Time When He no Longer Needs Continuous Nursing Supervision, He May Need Home Health Services Which He May Receive Either in a Nursing Home or the Intermediate Care Home or He May Get These Services in His Own Home.



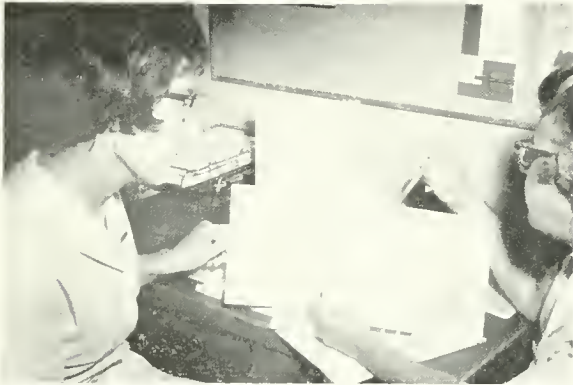
PART VI. BUILDING FOR THE FUTURE

In an effort to improve the well-being of mothers and children, and to reduce the maternal and infant death rates where possible, the SDH sponsors several programs in cooperation with local professional health and education personnel.

Education for Parenthood

Education for Parenthood Programs are conducted for expectant parents and for high school students. The local nurses serve as group leaders in the adult programs.

There were 422 expectant mothers attending the session in 1967-1968, 379 of whom were expecting their first babies while 43 had had children previously. There were 239 husbands who attended at least one session in the series of six. There was a total of 26 such series held in 13 communities. The communities where these classes were held are shown on the accompanying map.



Nurse Discussion Leaders are Prepared for Their Participation in Education for Parenthood Classes by Attending Workshops Sponsored by the SDH and by Consultation Provided by the Department's Nursing Consultants.



An Encouraging Trend Noted at the Education for Parenthood Workshops is the Participation of Elementary School Teachers as Well as Secondary School Teachers.

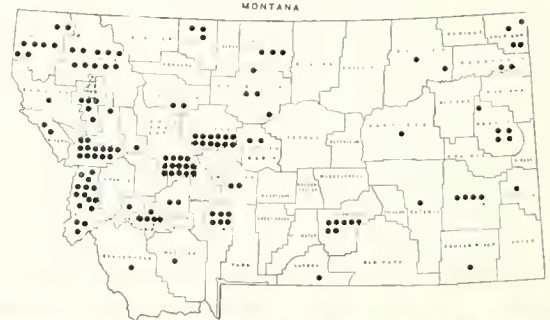
The Montana Education for Parenthood Program for Adults and high school students was presented at a table discussion by one of the Montana practicing obstetricians at meetings of the American College of Obstetrics and Gynecologists.

ADULT "EDUCATION FOR PARENTHOOD" CLASSES
FISCAL YEAR 1968



The high school programs are on-going and the trend toward integrating the Education for Parenthood Discussions into a broader "Family Life" Program has continued. Annual workshops to provide some training for teachers and nurses in this area are sponsored jointly by the SDH and the University of Montana at Missoula. The areas in the State where these participants work are shown on the accompanying map.

TEACHERS AND ADMINISTRATORS ATTENDING
EDUCATION FOR PARENTHOOD WORKSHOPS,
BY TOWN, 1964, 1966, 1967, 1968



Deryck Calderwood, Nationally Recognized Authority in Sex Education, has Been a Resource Person for the Education for Parenthood Workshops for Teachers and Nurses for the Past Three Years. At Present He is on the Staff of the Sex Information and Education Council of the United States (SIECUS).

Family Planning

The first community "Family Planning Program" was initiated in Missoula and Mineral Counties in August 1967. It is a program which provides information and education to all interested persons in these two counties and clinic services for those in need of them and who cannot provide them for themselves because of finances.

This is a program in which several groups participate—the O.E.O., The Planned Parenthood Association, the Missoula City-County Health Department, the practicing physicians in the area and the State Department of Health.

The staff includes a part-time medical director who is the Missoula City-County Health Officer, a nurse director, an outreach worker and a clerk. The office is housed in the Health Department in the Missoula County Courthouse.

Clinic services are provided by the nurse director, a part-time practicing physician and his office nurse. Some of the clinic services are provided on a rotating basis for a nominal fee by the practicing physicians.

During the first 10 months of the program 800 women had attended the educational sessions. Most of them are in the 22-40 year age group, a few are older and about 12% are under 22 years of age. There were over 100 women included in the clinic program during the first 10 months.

A second clinic program is planned for Hill County beginning on July 1, 1968.

The SDH will also initiate a statewide educational program on "Family Planning" at the beginning of the next biennium. An Advisory Committee will be formed and staff employed. As the educational program progresses the need for clinics will be assessed and if needed they will be promoted.

The purpose of the program is to aid parents space their children or to cease having more children than they wish to have and to aid parents who want children and have not been able to have them.



The Director of the Missoula-Mineral County Family Planning Program Counsels Each Individual Who Presents Herself for Informational or Clinic Services.

Health Services for Young Children



Initiating Good Health Habits Early in Life Plays a Major Part in Improving the Health Status of All Age Groups. Maternal and Child Health Programs are "Basic" Segments of Good Public Health.



A Large Proportion of the In-service Education for Local Public Health Nurses is Focused on Maternal and Child Health Activities. Most Recently All Public Health Nurses Have Had Concentrated Preparation in the Growth and Development of Young Children.



More than 30,000 Infants Die Each Year in the United States. Many of Them Die Needlessly. High Infant Mortality Rates are Associated with Inadequate Health Supervision, Complications of Pregnancy, Illegitimacy, Previous Maternal History of Stillbirths or Premature Delivery and a Short Interval Between Pregnancies, Low Incomes and Limited Education. A Public Health Nursing Project in Billings Helps Mothers in the "High Risk" Group Meet the Needs of Their Children. The Nurse Conducts Nursing Conferences to Give Guidance to Each Mother Individually and Later in Group Discussions on Child Growth and Development and Other Subjects of Concern to These Mothers.

A Similar Program with a Little Different Emphasis Will be Established in Butte at the Beginning of the Next Biennium. In This Program the SDH Nutritionist Will Serve as a Member of the Staff, as well as the Maternal and Child Health Nurse.



In the Billings Project, Each Infant is Seen at Least Once a Year by a Physician at a Child Health Conference. The Nurse May Refer for More Frequent Medical Attention Those Infants Not Progressing Satisfactorily.

The Lewis and Clark County's Children and Youth Project is another attempt to bring about improved health to children whose families are not able to provide all the professional care they need.

The SDH staff has served to provide consultation to the staff in the Children and Youth Project. Such consultation has included nutrition, social work, hearing and speech therapy, dental care and nursing.

Headstart Programs have shown that too many children are arriving at school age without having needed medical care. Through the Headstart Programs more services have been provided than were available to many families before.



Keeping Those Infants She Sees Protected Against Communicable Disease is a Part of the Child Health Nursing Conference. With the Addition of Immunization Against Measles and Mumps, Illnesses from Communicable Diseases Can be Drastically Reduced Among the Children Seen in the Billings Nursing Project.



The SDH Staff Provides Consultation to the Lewis and Clark County's Children and Youth Program.

These Programs have demonstrated that on-the-spot dealings could have overcome the factors that kept the family from seeking medical care. Parents must understand the need for care, there must be funds to pay for it, and there is often a need for assistance in making appointments and encouragement to keep the appointments after they are made. This latter factor may include the need for transportation and help to provide babysitting services for other children in the family.

The demonstrated success of health services coordinated at a Center such as Headstart may well be a clue to the future in providing medical care for young children. This is contrary to the principle of self-determination so long thought to be the only democratic or humane approach to medical care.

The findings of the Public Health Service's National Health Survey show a definite relationship between poor health and low income. In order to break the cycle of poor health, it is necessary to look at old theories and principles in the light of present day facts. The time may have arrived in which the infant mortality rate is not the most sensitive index of the health of a community.

The prenatal and children's clinics at the Division of Indian Health Hospital in Browning have been filled to overflowing as the 20 community aides have interested the people in family health. The nurse at Browning supervises these aides.

Day Care Centers

The licensure of Day Care Centers is a responsibility assigned by the legislature to the State Department of Public Welfare. At the request of the Welfare Department the SDH staff developed standards for the protection of the health of the children in these centers and the staff assists the Centers to meet these Standards when it is necessary.

School Health

Matters of mutual interest which relate to the health of the school-age population in Montana are discussed in meetings of the Joint Staff Committee. This Committee has representation from the State Department of Health and the State Department of Public Instruction. To this Joint Staff Committee there is an Advisory Council which has given continued assistance to the two State Departments since it was initiated in 1952.

The Joint Staff Committee sponsored a meeting with health instructors from Montana Public and Private Universities and Colleges. These meetings are usually held annually and provide an opportunity to discuss areas of need in teacher training, teachers and administrators in health. It is an attempt to improve communication among these groups.

There was representation from the SDH at a series of district meetings held in six locations in the fall of 1967 for school administrators. The subject of the meetings was "Innovations in Education." This provided an opportunity to emphasize several areas of neglect in the health instruction program.

In the spring of 1968, the survey on the "Status of Venereal Disease Education" described in Part IV of this report has indicated the need for improved general health instruction in Montana junior and senior high schools, as well as in the specific area of venereal disease education. This points to the need for the interest and participation of many groups.

SDH staff provides consultation to local school and public health workers on school health programs and problems. Faculty meetings to provide up-to-date information are held with school faculties, and nutrition education is one of the areas included.

The health of the school-aged has been a large part of the State Parent-Teacher Association Program for the past two years, with a representative from the SDH serving as the State Health Chairman of this Association.



The Staff Committee Between the State Department of Public Instruction and the State Department of Health Has Been Active Since 1951.

The Helena Public School System has a Health Education Curriculum Committee Working on the Development of a Comprehensive Health Education Program from the First Through the Twelfth Grades.



Public health nurses spend a good deal of time and effort in health programs for school-age children. In making use of Federal project funds (Elementary and Secondary Education Act) schools in both rural and urban areas have added nurses to their staffs as a way of improving services to school children. While some schools use public health nurses as consultants to their health programs, others provide direct nursing services to pupils and their families. All public health nurses in Montana include the schools in their areas of responsibility.

Dental Health

Montana's dental health program is carried out cooperatively between the practicing dentists in the State and the Dental Division of the SDH. Services provided to aid the dentists in their public health activities include: (1) a demonstration training program for providing dental services to the mentally retarded and other handicapped persons; (2) an Oral Cancer Demonstration Program which was conducted in the Butte-Anaconda area; (3) lactobacillus counts are made by the SDH laboratory on the request of the practicing dentists. This is a diagnostic device in rampant caries and an aid in diet analysis for refined sugars; (4) the development of a Public Health Dental Manual, and (5) chemical analyses of the fluoride content on water supplies from private water supplies made by the SDH chemistry laboratory on the request of the practicing dentists. This aids the dentists in prescribing fluorides for their patients who drink water that is low in fluoride content.

The object of the program to provide **dental service to the mentally retarded** is to demonstrate methods helpful to the practicing dentists in providing dental care for their handicapped patients who are usually thought of as "problem" patients. It is also providing a pool of dentists who will accept the mentally retarded individuals for treatment as a part of their regular practice.

The clinical aspects of the course are taught by a cadre of nine dentists who had previously received special training in the care of the handicapped at the University of Pennsylvania and at Columbia University.

The course is held at the Boulder River School and Hospital and the residents there receive dental care as the dentists are engaged in the clinical practice sessions of the course. The course is repeated once a month over a nine-month period. Each course is held for three days and attended by four practicing dentists.



Practicing Dentists in Montana are Attending a Course on Dental Services for the Mentally Retarded at the Boulder River School and Hospital.

The dentists who have attended the course have become interested in the mentally retarded and will give their assistance toward the development of improved services which are needed for them in their local communities.

The **Oral Cancer Detection Demonstration** began in May 1965 and continued to December 1967. The purpose of this Program was to alert practicing dentists and physicians to the importance of the early detection of oral lesions that need cytological study. During the demonstration period 76 oral "pap" smears were submitted. The program was initiated with an "Orientation Workshop" held in Butte in the early stages of the program.

A **Topical Fluoride Application Program** was initiated in Ravalli County in 1962. A survey conducted in 1960 showed that a serious dental problem existed. This survey was conducted by the SDH Dental Director and the practicing dentists in Ravalli County. Since dental treatment alone is not the answer to serious caries problems, the Topical Application Program was instituted as a preventive measure.

Each summer from 1962-1968, with the exception of the summer of 1967, the Ravalli County children were given a prophylaxis and a topical fluoride treatment. There were between 500 and 700 children who participated. The clinic was held for a week in Hamilton. It was sponsored by the Ravalli County Health Council with school personnel and parents participating. The SDH provided the supervision.

The results are measured by the permanent teeth "Decayed, Missing or Filled" (DMF) and by the deciduous teeth, "decayed, extracted, lost permanently or filled" (def).

A comparison between the results of the 1960 survey and the results of the 1968 survey which was done at the time that the topical applications were applied are shown below. The children included in this survey were those who had received one or more topical applications of fluoride.



The SDH Chemistry Laboratory Provides an Analyses of the Fluoride Content to Private Water Supplies at the Request of Practicing Dentists.

COMPARISON OF DMF AND DEF RATES FOR SIMILAR SIZED GROUPS IN THREE COMMUNITIES AND TWO HAMILTON SCHOOLS IN RAVALLI COUNTY

Place	No. of Children Examined	DMF 1968	DMF 1960	% Reduction	def 1968	def 1960	% Reduction
1968 Hamilton Base Survey	338	2.15			4.62		
Darby	257	2.15	3.11	31%	4.62	5.02	8%
Corvallis	295	2.15	2.43	12%	4.62	4.37	—5%
Stevensville	302	2.15	3.27	35%	4.62	4.78	4%
Jefferson School, Hamilton	346	2.15	3.96	56%	4.62	5.27	13%
Washington School, Hamilton	229	2.15	3.17	32%	4.62	4.93	7%

Highlighting the program results is the contribution made in dental health education with 89% of the children receiving dental care and only 5% having missing permanent teeth. In the six to eight year old group there were no missing permanent teeth.

The SDH Dental Health Director Assists the Practicing Dentists, the School Personnel and the Ravalli County Health Council Members Conduct the Hamilton Fluoride Topical Application Program. Through the Efforts of the Practicing Dentists, the School Personnel and Many Citizens Between 500 and 700 Children in Ravalli County Have Received this Caries Prevention Treatment each Year from 1962 Through 1968 with the Exception of 1967.



A Dental Health Education Demonstration Program was conducted in four High Schools in Missoula in 1966 and in 1967 a similar program was conducted in fifteen elementary schools in that city. Its purpose was to provide dental health education which would motivate young people to apply to daily living the knowledge they gained; to accept personal responsibility and firm motivation for personal action as to home care, professional dental check-ups, care and preventive measures.

Plans have been completed to reinstate the dental health referral card for preschool and school-aged children beginning in the fall of 1968. This program is statewide and was developed cooperatively by the SDH and the State Department of Public Instruction. Its purpose is to motivate parents to obtain regular dental supervision for their children.

The cards are provided by the State Department of Health and distributed by the teachers for the school-aged and by the public health nurses for the pre-school aged children.

There are seven Head Start Programs in the State in which there is provision for dental examinations, topical fluoride treatments and dental care for the children in need. Dental care is provided under Medicaid through the cooperation of the State Department of Welfare and the Montana State Dental Association.



PART VII. DIRECT SERVICES AND ADMINISTRATION

DIRECT SERVICES

The following services are those which (1) aid in carrying out several and in some instances all of the programs already described; (2) provide assistance to local public health programs and (3) show some of the relationships to other agencies.

Microbiology Laboratory

A State Laboratory Advisory Committee has been formed and is giving guidance to the Department's Laboratory Program.

The responsibility for the approval of "Independent Laboratories" in Montana under the provision of the Medicare Law has been delegated to the Microbiology Laboratory. There are five laboratories now operating in compliance with this law.

Steps have been taken to develop a general laboratory improvement program. A laboratory field section has been established to work with the 102 local laboratories in Montana and the 350 persons employed in them. Continuing education in medical laboratory science of all medical and allied health professionals has been an important concern.

With the assistance of the Advisory Committee, legislation is being drafted for the licensure of these laboratories and their personnel.

Direct laboratory services are provided to Montana physicians. Annually about 60,000 specimens are received for testing. The major sections of the laboratory are virology, serology, tuberculosis bacteriology, sanitary bacteriology (water analysis), and general bacteriology. Although many diseases have been brought under control, our results show that their causative agents are still around. For example, the organism causing typhoid fever was recovered four times and the one involved in diphtheria was isolated fifteen times in 1967. Continuous surveillance in the microbiology laboratory is necessary if the gains achieved by past efforts to control communicable diseases are to be kept. In the virology section an outbreak of aseptic meningitis due to Cocksackie B5 virus was discovered at the end of the summer of 1967 and viruses were isolated at the beginning of 1968 which proved that the epidemic of respiratory illness in progress was Asian influenza.

Vital Records

Probably the most important development in vital registration is that **new certificate forms to be used in the registration of births, deaths and fetal deaths have been introduced.** They follow closely the Standard Certificates recommended for use for these events by the Public Health Service.

New standard certificates are adopted approximately every ten years; however, it has been twelve years since the last revision was made in 1956. The certificates are revised in order to reflect changes in medical practice and the need for statistical data.

In the twelve-year period problems of population growth came to be recognized as a crucial factor in social and economic development. As births are the major determinant of population growth, the birth certificate became more crucial in the study of these problems.

Added to the information on the new certificates is information relative to the **socio-economic status of the parents.** Education is an important and specific socio-economic variable. It reflects differences in the environment in which the parents live, which may affect the prenatal care of the mother, the chances of fetal or infant death, the number of children wanted, and the care that can be given the children already

born. As a social characteristic, educational attainment has the advantage of being relatively constant after a couple begins to have children, is easily coded and can be compared with census data and is equally valid for both mother and father.

Items asking for the **dates of last live birth and fetal death are added** since this information is necessary for studies on spacing of children which also affects maternal health and care of the newborn and because changes in child spacing are the major factors behind fluctuation in the birth rate.

Changes in certificate forms always create problems; most important is the challenge of interpreting the rationale and new procedures required by the new certificate to the many persons throughout the State who are responsible for completing them.

A change has been made in the method of **storing detailed vital statistics data**. Since 1954, data from vital records have been stored in punched tabulation cards. However, when stored over a long period of time, the cards deteriorate with age and it becomes difficult, if not impossible, to process them on data processing equipment and they require more storage space than is available. To ameliorate this problem this data has been transferred from tabulating cards to magnetic tape. This will also make it possible to process the data more efficiently on modern data processing equipment.

Progress in microfilming vital records has continued and all death certificates on file through 1963 have been filmed and work is now well under way in filming birth records. This will also help solve the shortage of storage space.

A major change in the procedure followed for filing adoptions has been instituted. A new certificate has been designed which eliminates the need for the copy of the court order and a document which contained the information necessary to identify the original certificate for the child and the information necessary to prepare the certificate made pursuant to adoption. The new certificate provides better information concerning the adopting parents. This change also is an attempt to improve registration procedures and reduce the physical volume of paper necessary to maintain good records.

Education and Training

In-Service Training and Continuing Education

Directing, or participating in professional in-service training is one of the major responsibilities of the SDH staff. Area conferences are held for public health nurses, two annual conferences for sanitarians, workshops for dietitians, teachers, nurses and laboratory technicians.

Workshops in two sessions were conducted for Nursing Service Personnel in Nursing Homes and a conference for Nursing and Hospital Administrators and Nursing Service personnel were held.

Multidiscipline Seminars are sponsored by the State Department of Health and the Montana Public Health Association and conducted by the American Public Health Association, Western Regional Office staff. They are held twice a year. During the biennium the Seminars were: **"The Web of Communication;" "Legal Tools in Public Health Practice;" "Working With Teenagers" and "Comprehensive Health Planning."** A Seminar on **"Accident Prevention"** and an **In-Depth Seminar on Comprehensive Health Planning** are scheduled for the 1969 fiscal year.

At the Seminar on "Working with Teenagers" an Opportunity was Provided for the Adult Participants to Meet in Discussion Groups with Teenagers and as Shown at Right, Teenagers Had an Opportunity to Meet with Those in Their Own Age Group. The twenty-five Teenagers Came from Several Communities; from Broken Homes and Stable Homes. Some of Them were Leaders Among Their Peers, Some Had Been in Trouble with the Law, in Trouble at School or at Home. In fact, They Represented a Cross Section of Today's Society.



Nursing Education

The department continues to be involved in nursing education by providing guest lectures to schools of nursing and by arranging field practice for students during their public health phase. During the spring of 1967, seventy nursing students were ready for this experience and placements were made in nearly every public health nursing service in the State. Usually, the number of students is small enough to be accommodated by the two full-time health departments in Great Falls and Missoula, and the part-time department in Bozeman.

Library Services

The Department maintains a library of 5,538 books, with 201 purchased during the biennium. The books are used most extensively by the professional staff but are available for loan on request.

There are ninety-nine scientific public health periodicals subscribed to for staff use.

The film library contains 287 films; 37 were purchased during the biennium. Films were loaned 2,562 times and seen by 53,702 persons.

Thousands of individual pamphlets on health topics are filed for staff use, and there were 30,252 pamphlets distributed on request.

Publications

Pamphlets are prepared and printed when there are none available which fill the need for one of the Department's programs. During the biennium "What Everyone Should Know About Diabetes" and "How Long Has It Been Since You Thought About Your Hearing?" were developed and printed, and the Venereal Disease pamphlet, "Wise Up," was revised and its third printing was completed.

The Department's official bulletin, "Treasure State Health," was continued for its 17th year with a monthly mailing of approximately 2,500 copies.

Reports, articles and news releases are prepared.

Exhibits and Visual Aids

Exhibits and other visual aids are prepared as needed for specific programs.

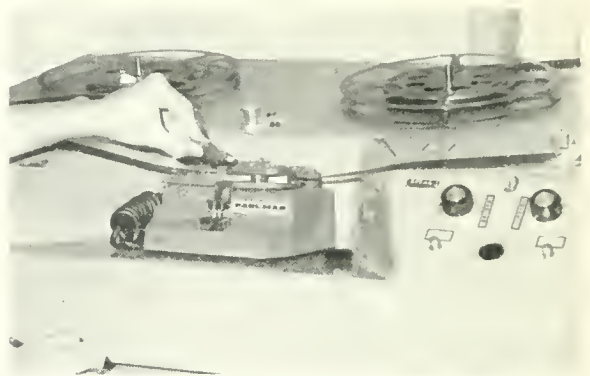
Relationships With Other Agencies and Groups

There are many State Agencies and Groups whose activities or concerns have a close relationship to health, and with these agencies close and helpful working relationships have been maintained. Among them are the State Department of Public Welfare which Agency delegated the maintenance of proper health standards for the facilities participating in Title XIX—Medicare—to the SDH. Diseases of animals transferable to man bring together the SDH and the Livestock Sanitary Board for joint problem solving. The State Department of Public Instruction, the State Division of Institutions, many Departments in the University System, the Fish and Game Department, Highway Department, Dairy Division, Department of Agriculture, and many other agencies are involved in joint activities with the SDH.

Industrial groups have both sought and given advice to the Department on matters relating to public health.

Working relationships are maintained with the PHS, Division of Indian Health, which has the responsibility for public health and medical care of the Indians living on the reservations in Montana. By contract the SDH Nursing Division provides supervision to the Nurses in Big Horn County. Nurses on all the reservations are included in in-service training programs for nurses and other continuing education programs are open to all PHS workers in the State. Many health problems need the joint action of the Indian Health Division and the SDH. On the Blackfeet Reservation the Office of Economic Opportunity employs a group of 20 community aides under the supervision of the nurse. The nurse in this program looks to the SDH for guidance in many areas of nursing and general health practices. These aides, employed to make home visits, have brought about a great increase of prenatal and children's clinics at the Indian Health Hospital at Browning.

The Federal Food and Drug and the Montana Food and Drug control staff work together very closely.



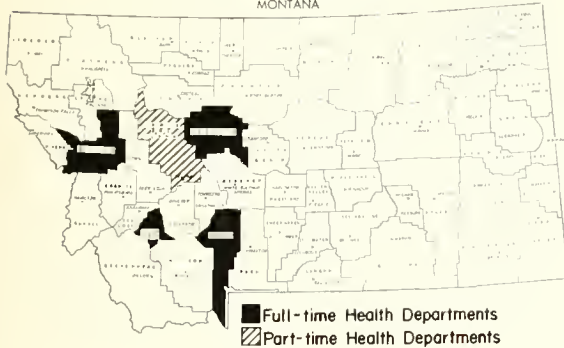
New Electronic Film Inspection and Repair Equipment Has Been Added to the Film Library to Facilitate the Inspection and Repair of the Increased Volume of Films Processed.

LOCAL HEALTH SERVICES

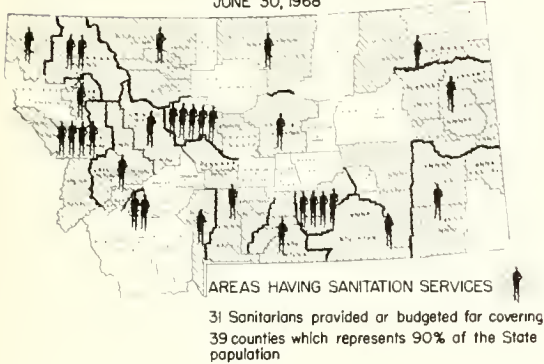
Consultation and Supervision

The SDH provides supervision, consultation, public health workers and programs at the community level and aids in recruitment. Some direct services are also provided to local areas.

PUBLIC HEALTH DEPARTMENTS
JULY 1, 1968
MONTANA



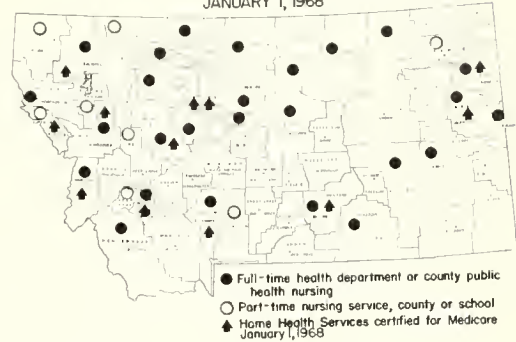
MONTANA SANITARIAN COVERAGE
JUNE 30, 1968



The Accompanying Maps Show There are Four Full-time Health Departments in the State: Cascade and Missoula Counties and a new one Initiated on July 1, 1968 in Silver Bow County, and one will be Established in Gallatin, August 1, 1968. These Counties have Boards Appointed Jointly by the County and City. Full-time Health Officers, Public Health Nurses and Sanitarians are Employed. In Some of the Other Counties it Will be Noted There are Public Health Nurses, or Sanitarians, and in Some Instances Both Nurses and Sanitarians. In These Counties Part-time Health Officers are Employed and the Board is Usually the Board of County Commissioners Acting as the Board of Health. There are a Few Instances Where First and Second Class Cities Have Their Own Boards of Health and Their Own Staff.

The Counties on the Maps Where No Services are Shown are the Counties Where There is Only a Part-time Health Officer and No Other Staff.

PUBLIC HEALTH NURSING SERVICES IN MONTANA
JANUARY 1, 1968



Direct services are provided to local areas when services cannot nor would it be feasible, to employ all the specialists needed to help solve public health problems so these specialized services are provided by the State. The State staff also assists local areas recruit staff and develop public health programs.

In 1917, the State Legislature charged the State Board of Health with development of "rules covering the qualifications and professional activities, duties . . ." etc., of school and **local public health nurses**. In addition, the department has responsibility for supervision of school nurses and all nurses employed in public health in the State. This function of the Division of Nursing is carried out as available staff time allows. There are only five nurses on the State staff available for the supervision of local nurses. There are nursing supervisors in Miles City and Butte to serve Areas 2 and 7 as shown on the map in Section VI on page 42.

Several nurses are employed in local schools funded by the Elementary and Secondary School Education Act. Prior to their employment school administrators asked for counsel, and guidance has been sought from the Nursing Division by the nurses following their employment. In one county where there has been no nursing service, a nurse employed under this program has demonstrated the need for public health nurses and developed interest among county officials to provide this service.

Consultation is provided the local Sanitarians in the development and improvement of their programs.

Since there are no local health educators, a good many Health Education programs are conducted in local areas by the State staff; volunteers trained and other education services are provided.

Assistance is given in the administration of the Child Development Center in Missoula, the Information and Referral Center in Great Falls, and the Information Center in Bozeman, and the Cardiac Diagnostic Centers in Great Falls and Missoula.

The supervision of local registrars is also a responsibility of the SDH.

Financial Assistance to Counties

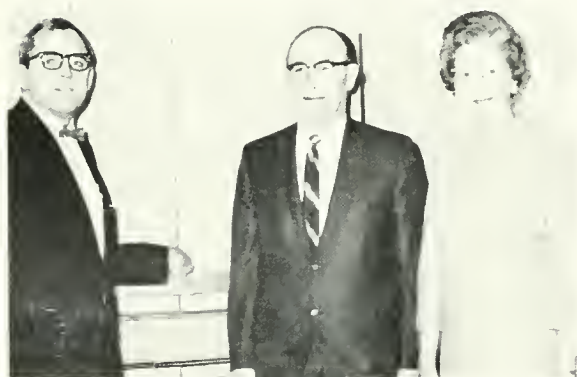


Interested County Commissioners and Local Health Officers from Several Montana Counties Attended a Meeting at which the Executive Officer Explained the Distribution of Funds for Local Health Services. He said the Amounts Which Have Been Available for this Purpose Have Been Less than \$25,000 During the Past Biennium. Commencing with Fiscal Year 1969 (beginning July 1, 1968) Considerably More will be Available. This is Due to Changes in Grants Which the SDH Received from the Public Health Service. The SDH has Established Guidelines to Determine Eligibility for These Funds. Local Health Departments are Required to Increase Their Public Health Services and Have Its Employees Under a Merit System. The Promise of Increased Funds has Stimulated the Local Departments to Consider the Employment of Full-time Health Officers Which Will Strengthen the Existing Sanitarian and Public Health Nursing Services.

ADMINISTRATION

The Montana State Board of Health

Members of the Board



George H. Gould, M.D.
Robert K. Knapp, M.D.
Mrs. O. H. Mann



R. J. Losleben

Paul H. Bowden, D.D.S.
Edwin C. Segard, M.D.
Mrs. Richard Ellis



Board Members' Terms of Office

	Appointed	Reappointed	Present Term Ends
Bowden, Paul H., D.D.S., Butte.....	6/1955	7/1962	6/1969
Ellis, Mrs. Richard, Great Falls.	12/1963	7/1968	6/1975
Gould, George H., M.D., Kalispell.	7/1966		6/1973
Knapp, Robert K., M.D., Wolf Point - - -	4/1961	7/1964	6/1971
Losleben, R. J., Malta. - - - - -	7/1953	7/1960 7/1967	6/1974
Mann, Mrs. O. H., Missoula .. - - - -	2/1961	7/1965	6/1972
Segard, Edwin C., M.D., Billings.	4/1966		6/1970

Mrs. O. H. Mann was elected president of the Board in July 1968. She replaces Mr. Losleben who had been president since 1961. He was the Board's vice-president prior to that date, beginning in 1957. Dr. Knapp is the vice-president and has held that position since 1966. John S. Anderson, M.D., M.P.H., is the Board's Secretary.

Montana legislation states, "The Board shall consist of seven (7) members, to be appointed by the Governor, three of whom shall have a degree of doctor of medicine, one of whom shall have the degree of dental surgery and three of whom shall be lay persons, each of whom has demonstrated intelligent and active interest in the field of public health in Montana. For the purpose of this act a 'lay person' is hereby defined as any person who does not hold the degree of doctor of dental surgery or doctor of medicine."

The Montana State Department of Health

Legislation in 1967 separated the staff from the Board by creating a Department of Health. This did not change the functions but clarified the distinction between the responsibilities of the Board which is policy making and the staff which carries out the public health programs.

The Department is an "equal opportunity" agency. Personnel are employed on the basis of merit and there is no discrimination because of race, religious belief or color. This employment practice extends to local departments and to any agency, corporation, or individual the State Department of Health either gives money to or purchases goods or services from.

The Staff

For administrative purposes, the staff, under the direction of the Executive Officer, is organized in major divisions. During the Biennium two new divisions were created: Comprehensive Health Planning, and Air Pollution and Industrial Hygiene. The divisions of Hospital Facilities and Medical Facilities Certification were combined into one division—Hospital and Medical Facilities.

Directors of Major Divisions



**John S. Anderson, M.D.,
M.P.H., Executive Officer
and Acting Director,
Child Health Services**



**Mary E. Soules, M.D.,
M.P.H., Deputy Health
Officer and Director of
Disease Control**



**Robert A. James,
Administrative Officer**



**S. C. Pratt, M.D., Director,
Hospital and Medical
Facilities**



**C. W. Brinck, Director,
Environmental Sanitation**



**John C. Wilson, Director,
Comprehensive Health
Planning**



**(Mrs.) K. Elizabeth Burrell,
Director, Public Health
Education**



**Benjamin K. Wake, Director,
Air Pollution and
Industrial Hygiene**



**A. Jack Terrill, D.D.S.,
Director, Dental Health**



**(Mrs.) Virginia Geiger
Kenyon, Director of Nursing**



**David B. Lackman, Ph.D.,
Director, Microbiology
Laboratory**

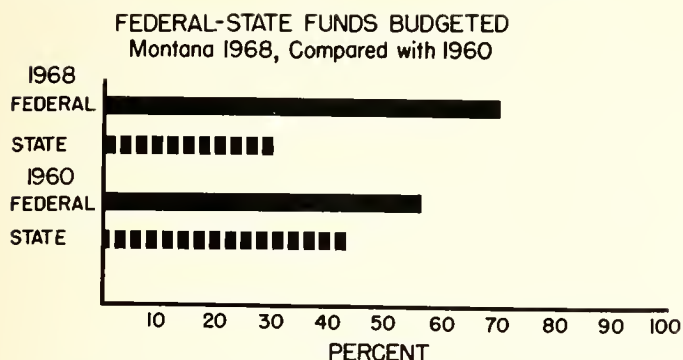
The position of Director of Records and Statistics has been vacant since Mr. Wilson became the Director of Comprehensive Health Planning. He serves as the Acting Director of Records and Statistics.

Planning

In fiscal year 1968 Public Health Service funds were allotted in one large block grant which replaced eight separate categorical health grants of prior years. This has permitted a wider latitude of choice for the use of funds at the State level. It has resulted in more program effectiveness, and has brought about the necessity for long-range program planning so that the most desirable health programs can be provided to the greatest number of persons in need of them.

This also necessitates an analysis of programs to decide which ones are worthy of initiation or continuation or which must be curtailed or discontinued. Improved programming is required to coordinate department programs, both internally and with other agencies providing health services.

An adequate base for the delivery of services is required so that desirable health services are made available to all persons. Federal requirements state that planning and the delivery of health services be designed especially for the provision of services to those populations at risk because of socio-economic conditions, geographic location or other factors.



The costs of health services have led the rise in the cost of living during the past year. This has been promptly reflected in the provision of health services. The services for crippled children have been particularly affected. The added cost of personnel and supplies has made it difficult to broaden the base of general health services.

Another problem that occurred was caused by a reduction in the number of federally grant supported special projects. Several desirable and beneficial health programs begun in previous bienniums with 100% of support from special federal project funds have been discontinued or drastically curtailed. This has been brought about by the necessary Federal economy moves of the past year. The economy measures contrast sharply with the national feeling of the necessity for the provision of more adequate public health care for the general population, but especially for those segments of the population considered to be disadvantaged for one reason or another.

Hospital services to persons in the Crippled Children's program were almost totally curtailed during the period from July through October 1968, because a satisfactory agreement could not be reached with Montana hospitals providing services to the program. In November services were resumed under a temporary agreement which had not yet been put on a permanent basis at the end of the year. The primary point of dispute was the basis for the computation of the reasonable cost allowed for payment by the Federal health agencies. The result of the temporary cessation of services for more than four months was a backlog of Crippled Children's cases requiring services which were difficult to schedule during the balance of the year.

Personnel

The biggest problem during the biennium was securing sufficient personnel for the conduct of agency health problems. The Child Health Services program, the Environmental Health program, the Air Pollution Control program, and the Occupational Health program could not operate at full efficiency because of lack of key personnel. Despite broad recruitment efforts long-time vacancies have occurred in physician, sanitary and industrial hygiene engineer, speech and hearing therapist, public health nurse, and other professional positions. The problem has become so acute that it is indicated that a professional personnel technician should be assigned to general personnel management, with emphasis on recruitment.

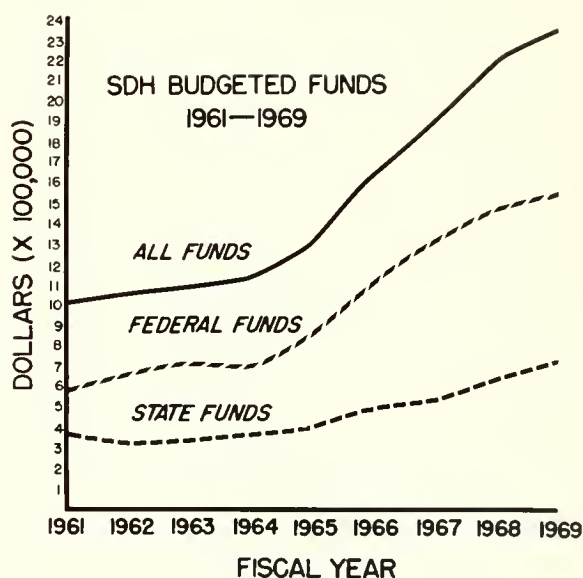
A survey made by the U. S. Department of Health, Education, and Welfare of salaries paid for public health classifications shows that they rose about 12% in the period from January 1, 1966 to January 1, 1968. This increase is a continuation of the trend begun several years before. The rise in salaries requires additional funds for continuance of operations and increases the need for better recruitment techniques and effort for obtaining scarce personnel.

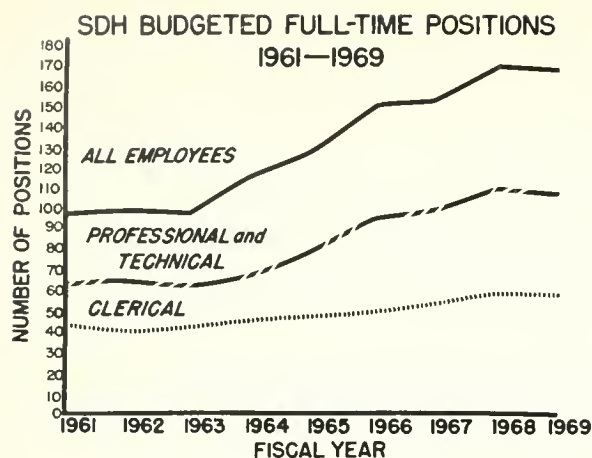
Budgets

The increase in State funds for operation of health services during the biennium was matched by increases in federal grant funds. The graph at left shows the increase in the percentage of federal funds budgeted in 1968 as compared with 1960.

In 1968 all Federal funds were matched whereas in 1967 there was not an adequate amount of State funds to match all Federal funds. Unused funds existed in heart, radiological health and crippled children's categories, but the situation was alleviated in 1968.

A considerable portion of the State funds appropriated for the biennium consisted of funds for air pollution control to support 1967 legislation in that area.





The personnel turnover rate was 37% in fiscal 1967. This was a considerable increase from the 21% in fiscal 1965 and 23% in fiscal 1966. The turnover rate for fiscal 1968 was identical to fiscal 1966 at 23%. Staff vacancies throughout fiscal 1968 amounted to almost 10% of the number of budgeted positions.

In a small way a process of decentralization has begun so as to put personnel closer to the area requiring health services. A nursing and engineering office has been established at Billings, an engineering and sanitarian office is planned for Kalispell, and various other personnel are situated in the offices of local health departments for program assistance and case follow-up.

Problems of Office Space

With the modest increase in personnel and the ever increasing quantity of records, the matter of space has become a chronic problem. Each year it becomes necessary to rent more space away from the main headquarters. Late in fiscal 1968 additional space was contracted for the West wing of the former St. Peter's Hospital. This will house the Comprehensive Health Planning Division, the Dental Health Division and some smaller units to be assigned later. In response to space needs some of the divisions have resorted to microfilming of Department records. The costs of the preparing and reading of the film records will prove less than the cost of the space formerly occupied by the paper records.

FINANCIAL TABLES

BUDGETS AND EXPENDITURES

State and Federal Funds

FISCAL YEARS 1962 TO 1969

Year		Total	Federal*	State**
1969	Budgeted (Preliminary)	\$2,372,621	\$1,579,574	\$ 793,047
1968	Budgeted	2,193,599	1,525,595	668,004
	Expended	1,967,792	1,330,225	637,567
1967	Budgeted	1,910,289	1,373,498	536,791
	Expended	1,662,928	1,133,221	529,707
1966	Budgeted	1,634,148	1,130,448	503,700
	Expended	1,470,776	970,409	500,367
1965	Budgeted	1,339,097	908,647	430,450
	Expended	1,239,247	809,881	429,366
1964	Budgeted	1,139,277	727,599	411,678
	Expended	1,089,645	695,180	394,465
1963	Budgeted	1,123,527	747,140	376,387
	Expended	1,023,597	660,913	362,684
1962	Budgeted	1,087,985	706,685	381,300
	Expended	989,568	629,379	360,189

*Excludes Federal construction grants for hospital, medical and sanitary facilities.

**Fees and contributions are included in State funds.

Summary of Expenditures and Encumbrances by Object

Object	July 1, 1966- June 30, 1967	July 1, 1967- June 30, 1968	Total
Salaries.....	\$ 956,608.50	\$1,093,522.20	\$2,050,130.70
Employee Benefits.....	71,519.26	89,867.94	161,387.20
Travel.....	104,270.34	142,938.43	247,208.77
Office Supplies.....	142,959.22	145,115.45	288,074.67
Scientific Supplies.....	18,570.31	6,142.09	24,712.40
Capital Equipment.....	36,153.89	98,269.83	134,423.72
Drs. Fees, Clinics.....	141,135.55	165,935.22	307,070.77
Hospitalization.....	119,143.54	117,004.89	236,148.43
Appliances.....	13,462.49	17,339.64	30,802.13
Miscellaneous.....	29,540.63	62,077.91	91,618.54
Aid to Counties.....	18,083.77	18,420.94	36,504.71
Merit System.....	11,480.19	11,158.05	22,638.24
TOTAL	\$1,662,927.69*	\$1,967,792.59*	\$3,630,720.28
*Encumbrances 1967	\$ 78,038.76		
1968	161,229.06		

Summary of Project Construction Schedules for Hospitals, Medical Facilities, Rehabilitation Facilities, Mental Retardation Facilities and Mental Health Facilities

Project	Location	No. of Beds	Total Est. Cost	Est. Fed. Share	Status
1. HOSPITALS:					
St. Peter's Hospital.....	Helena	82			
		10 Mental	\$3,576,600.65	\$1,418,977.84	Completed
Sheridan Memorial Hospital...	Plentywood	Modern- ization	29,475.00	11,790.00	Under Const.
Dahl Memorial Hospital.....	Ekalaka	Modern- ization	49,653.75	19,861.50	Under Const.
Glendive Community Hospital.....	Glendive	46	1,205,200.00	482,080.00	Under Const.
Carbon County Memorial Hospital....	Red Lodge	Modern- ization	101,881.00	40,752.00	Under Const.
TOTALS		138	\$4,962,810.40	\$1,973,461.34	
2. MEDICAL FACILITIES					
St. Peter's Hospital.....	Helena	19	\$ 423,485.29	\$ 171,552.52	Completed
Teton County Nursing Home.....	Choteau	29	333,715.00	133,486.00	Under Const.
Roundup Memorial Hospital.....	Roundup	16	222,775.51	89,110.20	Completed
Lutheran Home of Good Shepherd.....	Hovre	60	964,006.23	333,832.72	Completed
Sheridan Memorial Hospital.....	Plentywood	27	429,373.00	171,749.20	Under Const.
Dahl Memorial Hospital.....	Ekalaka	21	83,709.17	33,483.67	Under Const.
Carbon County Memorial Hospital.....	Red Lodge	24	393,821.00	157,528.40	Under Const.
Volley View Home.....	Glaegow	60	894,545.00	346,618.00	Under Const.
TOTALS		256	\$3,754,430.20	\$1,437,360.71	
3. REHABILITATION FACILITIES:					
Missoula Rehabilitation Center.....	Missoula	Outpatient	\$ 416,047.00	\$ 228,825.85*	Prep. Draw & Spec.
*Includes transfer of \$150,045.73 to Montana by other states.					
4. MENTAL RETARDATION FACILITIES:					
Boulder River School & Hospital.....	Boulder	150	\$ 781,019.00	\$ 190,000.00	Under Const.
Eastern Montana Facility for the Mentally Retarded.....	Glendive	32	348,333.00	183,333.00	Prep. Draw. & Spec.
Boulder River School & Hospital.....	Boulder	176	1,248,585.20	348,585.20*	Prep. Draw. & Spec.
TOTALS		358	\$2,377,937.20	\$ 721,918.20	
*Includes transfer of \$206,663.21 to Montana by other states and transfer of \$68,589.00 from Mental Health to Mental Retardation.					
5. MENTAL HEALTH FACILITIES:					
Comprehensive Community Mental Health Center.....	Billings	Outpatient	\$ 420,000.00	\$ 231,000.00	Prep. Draw. & Remodeling

Montana State Department of Health

Summary of Expenditures & Encumbrances by Sources

	JULY 1, 1966 TO JUNE 30, 1967			JULY 1, 1967 TO JUNE 30, 1968		
	State	Federal	Total	State	Federal	Total
ADMINISTRATION	(\$ 50,837.65)	(\$ 63,727.72)	(\$ 114,565.37)	(\$ 58,051.36)	(\$ 86,386.98)	(\$ 144,438.34)
General	48,280.08	41,058.83	89,338.91	51,742.86	60,511.93	112,254.79
Merit System	.....	11,480.19	11,480.19	.....	11,158.05	11,158.05
Training	.....	.....	.....	.....	2,636.16	2,636.16
Emergency Health Planning	2,557.57	11,188.70	13,746.27	6,308.50	12,080.84	18,389.34
CHILD HEALTH SERVICES	(85,123.73)	(393,544.14)	(478,667.87)	(137,191.06)	(384,923.64)	(522,114.70)
Maternal and Child Health	.....	88,064.31	88,064.31	15,475.58	91,230.87	106,706.55
Well Child Conferences	.....	.....	.....	.....	425.00	425.00
Drugs and Biologics	.....	8,918.31	8,918.31	.....	.....	.....
Crippled Children	18,516.67	23,835.19	42,351.86	15,831.25	35,606.78	51,438.03
Surgical and Doctors Fees	23,520.07	63,347.24	86,867.31	21,723.44	57,291.37	79,014.81
Hospitalization	17,732.30	92,000.92	109,733.22	33,764.58	69,121.24	102,885.82
Appliances	4,435.70	9,026.79	13,462.49	6,985.16	9,865.73	16,850.89
Clinics & Auxiliary	.....	.....	.....	7,588.07	13,827.00	21,415.07
Center for Handicapped Children	20,918.99	48,416.38	69,335.37	35,822.88	35,575.65	71,398.53
Cleft Palate	.....	59,935.00	59,935.00	.....	71,980.00	71,980.00
DENTAL HEALTH	(2,093.63)	(42,433.86)	(44,527.49)	(2,044.85)	(37,662.14)	(39,706.99)
General	2,093.63	27,923.11	30,016.74	2,044.85	12,869.45	14,914.30
Oral Cancer	.....	2,011.55	2,011.55	.....	28.95	28.95
Dental Health Grant	.....	12,499.20	12,499.20	.....	3,197.94	3,197.94
Dental Services to M.R.	.....	.....	.....	.....	21,565.80	21,565.80
DISEASE CONTROL	(63,873.22)	(347,425.79)	(411,299.01)	(72,935.63)	(398,252.36)	(471,187.99)
General	52,658.35	56,799.25	109,457.60	56,385.95	46,408.73	102,794.68
Hearing Conservation	.....	17,912.88	17,912.88	.....	12,422.62	12,422.62
Community Vaccination Program	.....	26,044.38	26,044.38	.....	43,873.87	43,873.87
Emergency Medical Services	.....	11,080.30	11,080.30	.....	12,728.38	12,728.38
Air Pollution Control	.....	19,346.03	19,346.03	.....	.....	.....
Radiological Health	.....	1,765.32	1,765.32	.....	3,395.07	3,395.07
Heart Diagnostic Center	9,867.25	27,800.95	37,668.20	3,447.72	41,369.86	44,817.58
Heart, Cancer, Strake	.....	10,698.83	10,698.83	.....	4,191.48	4,191.48
Military Rejection Program	.....	12,756.62	12,756.62	.....	18,220.21	18,220.21
Venereal Disease Control	36.62	13,578.96	13,615.58	213.62	11,283.26	11,496.88
T.B. Special	.....	42,536.95	42,536.95	.....	78,916.32	78,916.32
Inf. and Referral Center	.....	22,496.45	22,496.45	.....	22,710.70	22,710.70
M.R. Survey	1,311.00	27,694.04	27,694.04	.....	23,667.77	23,667.77
M.R. Clinic	.....	56,914.83	56,914.83	.....	53,246.33	53,246.33
Chronic Illness	.....	.....	.....	12,888.34	25,817.76	38,706.10
ENVIRONMENT SANITATION	(98,942.47)	(46,020.16)	(144,962.63)	(55,958.91)	(57,250.33)	(113,209.24)
General	57,822.51	21,204.40	79,026.91	55,860.69	38,755.63	94,616.32
Water Pollution Control	41,072.78	24,475.73	65,548.51	.....	.....	.....
Sanitarian Reg. Council	47.18	.....	47.18	98.22	.....	98.22
Solid Wastes	.....	340.03	340.03	.....	18,494.70	18,494.70
HEALTH EDUCATION	(18,981.78)	(17,854.86)	(36,836.64)	(24,695.00)	(30,125.40)	(54,820.40)
General	18,981.78	17,854.86	36,836.64	24,695.00	15,441.53	40,136.53
Smoking and Health	.....	.....	.....	.....	14,683.87	14,683.87

Montana State Department of Health **Summary of Expenditures & Encumbrances by Sources**

	JULY 1, 1966 TO JUNE 30, 1967			JULY 1, 1967 TO JUNE 30, 1968		
	State	Federal	Total	State	Federal	Total
HOSPITAL AND MEDICAL FACILITIES.....	(42,329.18)	(80,359.14)	(122,688.32)	(50,275.60)	(91,751.77)	(142,027.37)
Hospital Facilities	32,434.59	6,219.88	38,654.47	36,776.19	17,281.94	54,058.13
Hospital and L.T.C. Licensing.....	9,894.59	.....	9,894.59	13,499.41	.....	13,499.41
Medical Facilities Certification.....	.....	74,139.26	74,139.26	.....	74,469.83	74,469.83
LABORATORIES	(85,806.83)	(24,641.98)	(110,448.81)	(68,930.00)	(55,993.27)	(124,923.27)
LOCAL HEALTH SERVICES.....	.....	( 18,083.77)	(18,083.77)	(2,470.07)	(16,991.11)	(19,461.18)
Aid to Counties.....	.....	18,083.77	18,083.77	2,470.07	15,950.87	18,420.94
Family Planning .....	.....	.....	.....	.....	1,040.24	1,040.24
NURSING	(24,732.55)	(94,866.29)	(119,598.84)	(44,000.93)	(82,512.32)	(126,513.25)
General	17,789.60	22,767.26	40,556.86	21,491.34	25,223.96	46,715.30
Home Health Services.....	.....	16,209.80	16,209.80	.....	57,288.36	57,288.36
S.W. District Nursing Serv.	6,942.95	55,889.23	62,832.18	22,509.59	.....	22,509.59
RECORDS AND STATISTICS.....	(56,985.91)	(4,263.03)	(61,248.94)	(61,187.77)	(1,024.58)	(62,212.35)
WATER POLLUTION .....	.....	.....	.....	( 38,903.58)	(34,642.20)	(73,545.78)
AIR POLLUTION & INDUSTRIAL HYGIENE.....	.....	.....	.....	( 20,922.39)	(35,100.30)	(56,022.69)
Air Pollution Control.....	.....	.....	.....	16,946.81	35,100.30	52,047.11
Individual Hygiene .....	.....	.....	.....	3,975.58	.....	3,975.58
COMPREHENSIVE HEALTH PLANNING.....	.....	.....	.....	.....	( 17,609.04)	(17,609.04)
TOTALS	\$ 529,706.95	\$ 1,133,220.74	\$ 1,662,927.69	\$ 637,567.15	\$ 1,330,225.44	\$ 1,967,792.59

Montana State Department of Health **Total Expenditures and Encumbrances Fiscal Years 1963-1968**

	1963	1964	1965	1966	1967	1968
ADMINISTRATION	(\$ 79,475.44)	(\$ 91,975.91)	(\$ 96,264.65)	(\$ 108,575.86)	(\$ 114,565.37)	(\$ 144,438.34)
General	71,011.36	78,780.33	81,752.59	88,479.07	89,338.91	112,254.79
Merit System	8,464.08	9,266.79	9,698.36	11,130.45	11,480.19	11,158.05
Training .....	.....	.....	.....	.....	.....	2,636.16
Emergency Health Planning .....	.....	3,928.79	4,813.70	8,966.34	13,746.27	18,389.34
CHILD HEALTH SERVICES	(269,963.04)	(319,337.49)	(344,686.27)	(420,141.17)	(478,667.87)	(522,114.70)
Maternal and Child Health	51,595.32	61,466.54	63,562.17	85,529.65	88,064.31	106,706.55
Well Child Conferences .....	.....	.....	.....	.....	.....	425.00
Drugs and Biologics .....	.....	.....	.....	.....	.....	8,918.31
Crippled Children	46,984.08	56,601.64	44,874.11	49,443.77	42,351.86	51,438.03
Surgical and Doctors Fees	33,474.35	39,629.70	44,839.39	67,793.02	86,867.31	79,014.81
Hospitalization	34,790.05	50,421.61	65,272.17	76,460.91	109,733.22	102,885.82
Appliances	7,211.50	9,625.38	13,562.01	15,250.92	13,462.49	16,850.89
Clinics and Auxiliary .....	.....	.....	.....	.....	.....	21,415.07
Center for Handicapped Children	45,907.74	51,543.00	59,586.42	66,261.75	69,335.37	71,398.53
Cleft Palate Program	50,000.00	50,049.62	52,990.00	59,401.15	59,935.00	71,980.00
DENTAL HEALTH	(29,829.04)	(23,077.57)	(33,572.73)	(40,959.91)	(44,527.49)	(39,706.99)
General	29,829.04	23,077.57	22,394.39	23,542.36	30,016.74	14,914.30
Oral Cancer Demonstration .....	.....	.....	4,215.24	4,069.55	2,011.55	28.95
Dental Health Grant .....	.....	.....	6,963.10	13,348.00	12,499.20	3,197.94
Dental Services to M.R. ....	.....	.....	.....	.....	.....	21,565.80
DISEASE CONTROL	(206,473.22)	(226,406.72)	(301,984.80)	(337,699.77)	(411,299.01)	(471,187.99)
General	90,504.32	100,176.65	103,037.53	101,947.70	109,457.60	102,794.68
Cancer Special	20,561.22	.....	.....	.....	.....	.....
Hearing Conservation Program .....	.....	147.36	4,882.01	20,439.69	17,912.88	12,422.62
Community Vaccination Program .....	.....	235.83	53,362.88	50,301.58	26,044.38	43,873.87
Emergency Medical Services .....	.....	.....	.....	5,472.69	11,080.30	12,728.38
Drugs and Biologics	—643.88*	21.44	556.24	—394.32*	.....	.....
Air Pollution Special .....	.....	.....	.....	11,539.89	19,346.03	.....
Radiological Health	1,103.33	11,064.93	10,496.44	2,217.02	1,765.32	3,395.07
Cardiac Diagnostic Center	38,125.16	37,365.07	37,289.96	37,330.28	37,668.20	44,817.58
Heart, Cancer, Stroke .....	.....	.....	.....	.....	10,698.83	4,191.48
Medical Rejectee Program .....	.....	.....	.....	11,329.67	12,756.62	18,220.21
Venereal Disease Control	13,349.05	14,405.57	17,526.34	11,636.17	13,615.58	11,496.88
Heart Sounds Screening .....	.....	7,135.37	.....	.....	.....	.....
T.B. Special .....	.....	.....	.....	.....	42,536.95	78,916.32
I. & R. Center .....	.....	.....	.....	.....	22,710.70	22,710.70
Mental Retardation Survey .....	.....	.....	17,646.90	21,909.40	23,807.45	23,667.77
Mental Retardation Clinic .....	.....	.....	.....	.....	27,694.04	53,246.33
Chronic Illness	43,474.02	55,854.50	57,186.50	63,970.00	56,914.83	38,706.10
ENVIRONMENTAL SANITATION	(116,442.28)	(131,149.33)	(140,646.43)	(149,518.29)	(144,962.63)	(113,209.24)
General	63,309.66	72,252.37	83,736.66	88,769.73	79,026.91	94,616.32
Water Pollution	52,995.16	58,736.31	56,826.28	60,624.83	65,548.51	.....
Solid Wastes Program .....	.....	.....	.....	.....	340.03	18,494.70
Sanitation Reg. Council	137.46	160.65	83.49	123.73	47.18	98.22
HEALTH EDUCATION	(36,165.78)	(30,651.87)	(34,553.68)	(38,444.69)	(36,836.64)	(54,820.40)
General	36,165.78	30,651.87	34,553.68	38,444.69	36,836.64	40,136.53
Smoking and Health .....	.....	.....	.....	.....	.....	14,683.87

Montana State Department of Health **Total Expenditures and Encumbrances Fiscal Years 1963-1968**

	1963	1964	1965	1966	1967	1968
MEDICAL FACILITIES						
Hospital Facilities	(34,181.09)	(33,138.97)	(32,043.86)	(67,479.10)	(122,688.32)	(142,027.37)
Hospital & L.T.C. Licensing .....	.....	.....	.....	34,770.17	38,654.47	54,058.13
Medical Facilities Certification .....	.....	.....	.....	2,517.65	9,894.59	13,499.41
LABORATORIES DIVISION	(98,957.03)	(92,220.17)	(99,599.26)	(105,045.03)	(110,448.81)	(124,923.27)
LOCAL HEALTH SERVICES	(86,586.35)	(76,375.48)	(81,146.75)	(63,055.32)	(18,083.77)	(19,461.18)
Mental Health	40,924.83	54,240.15	54,946.89	33,381.77	.....	.....
T.B. Special .....	.....	.....	7,351.40	11,157.00	.....	.....
Aid to Local Areas	45,661.52	22,135.33	18,848.46	18,516.55	18,083.77	18,420.94
Family Planning .....	.....	.....	.....	.....	.....	1,040.24
DIVISION OF NURSING	(20,522.20)	(19,193.28)	(22,315.98)	(68,989.70)	(119,598.84)	(126,513.25)
General	20,522.20	19,193.28	22,315.98	30,459.48	40,556.86	46,715.30
Home Health Services .....	.....	.....	.....	38,530.22	79,041.98	57,288.36
S.W. District Nursing Service .....	.....	.....	.....	.....	.....	22,509.59
RECORDS AND STATISTICS	(45,001.54)	(46,118.00)	(52,432.25)	(70,867.03)	(61,248.94)	(62,212.35)
WATER POLLUTION .....	.....	.....	.....	.....	.....	( 73,545.78)
AIR POLLUTION & INDUSTRIAL HYGIENE .....	.....	.....	.....	.....	.....	( 56,022.69)
Air Pollution Control .....	.....	.....	.....	.....	.....	52,047.11
Industrial Hygiene .....	.....	.....	.....	.....	.....	3,975.58
COMPREHENSIVE HEALTH PLANNING .....	.....	.....	.....	.....	.....	( 17,609.04)
TOTALS	\$1,023,597.01	\$1,089,644.79	\$1,239,246.66	\$1,470,775.87	\$1,662,927.69	\$1,967,792.59
Federal	660,913.43	695,179.57	809,880.39	970,408.98	1,133,220.74	1,330,225.44
State	362,108.40	393,718.62	422,666.27	493,296.22	514,077.25	608,201.59
Other	575.18	746.60	6,700.00	7,070.67	15,629.70	29,365.56

*Refunds exceeded expenditures.

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